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*Dept. of Entomology  
Keeper's Study.  
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INSECTS OF SAMOA  
AND OTHER SAMOAN TERRESTRIAL  
ARTHROPODA

PART IV. COLEOPTERA

FASC. 5. Pp. 249-346

CURCULIONIDAE

By SIR GUY MARSHALL, C.M.G., D.Sc., F.R.S.

WITH THIRTY-ONE TEXT-FIGURES



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# INSECTS OF SAMOA

## AND OTHER SAMOAN TERRESTRIAL ARTHROPODA

Although a monograph, or series of papers, dealing comprehensively with the land arthropod fauna of any group of islands in the South Pacific may be expected to yield valuable results, in connection with distribution, modification due to isolation, and other problems, no such work is at present in existence. In order in some measure to remedy this deficiency, and in view of benefits directly accruing to the National Collections, the Trustees of the British Museum have undertaken the publication of this account of the Insects and other Terrestrial Arthropoda collected in the Samoan Islands, in 1924-1925, by Messrs. P. A. Buxton and G. H. E. Hopkins, during the Expedition of the London School of Hygiene and Tropical Medicine to the South Pacific. Advantage has been taken of the opportunity thus afforded, to make the studies as complete as possible by including in them all Samoan material of the groups concerned in both the British Museum (Natural History) and (by courtesy of the authorities of that institution) the Bishop Museum, Honolulu.

It is not intended that contributors to the text shall be confined to the Museum Staff or to any one nation, but, so far as possible, the assistance of the leading authorities on all groups to be dealt with has been obtained,

The work is divided into nine "Parts" (see p. 3 of wrapper), which are subdivided into "Fascicles." Each of the latter, which appear as ready in any order, consists of one or more contributions. On the completion of the systematic portion of the work it is intended to issue (in Part IX), a general survey, summarising the whole and drawing from it such conclusions as may be warranted.

A list of Fascicles already issued will be found on pp. 3 and 4 of this wrapper.

E. E. AUSTEN,  
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BRITISH MUSEUM (NATURAL HISTORY),  
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# INSECTS OF SAMOA

PART IV. FASC. 5

## CURCULIONIDAE

BY SIR GUY MARSHALL, C.M.G., D.Sc., F.R.S.

(With 31 Text-figures.)

THE importance of the collections of CURCULIONIDAE here dealt with is sufficiently indicated by the fact that when a list of the species occurring in the Samoan Islands was published ten years ago (*Proc. Hawai. Ent. Soc.*, iv, pp. 585-600, 1921) only 22 species, belonging to 15 genera, were recorded; whereas now these numbers have been increased to 86 species and 55 genera, of which 54 species and 15 genera are here described for the first time. In addition, there are 8 species represented by single specimens, either in poor condition or of uncertain generic position, which have not been dealt with.

The following table will give an idea of the distribution of these insects so far as it is known, the names of the new species and genera being printed in heavier type.

	UPOLU.	TUTUILA.	SAVAIL.	FURTHER DISTRIBUTION.
<b>BRACHYDERINAE</b>				
<i>Ottinychus buxtoni</i> , n. . . .	×			
„ <i>hopkinsi</i> , n. . . .	×			
<b>OTIORRHYNCHINAE</b>				
<i>Sphaerorrhinus puncticollis</i> , Mshl. . . .		×		Manu'a.
„ <i>mutans</i> , n. . . .	×			
<i>Elytrurus samoensis</i> , Mshl. . . .	?			
„ <i>bicolor</i> , Mshl. . . .	×	×	×	
<i>Trigonops spongicollis</i> , Fairm. . . .	×	×	×	Tahiti.
<b>ERIRRHININAE</b>				
<i>Nodocnemus subfasciatus</i> , n. . . .	×			
<i>Hesychobius nebulosus</i> , n. . . .	×			

	UPOLU.	TUTUILA.	SAVAIL.	FURTHER DISTRIBUTION.
APIONINAE				
<i>Cylas formicarius</i> , F. . . .		×		Throughout the Tropics.
ANTHONOMINAE				
<i>Amblycnemus stvensoni</i> , n. . .	×	×		
<i>Rhynchaenus samoanus</i> , n. . .		×	×	
TYCHINAE				
<i>Nesendaeus setolineatus</i> , n. . .	×			
ACICNEMIDINAE				
<i>Acicnemis variegata</i> , Fairm. . .	×	×		Fiji, Tahiti, Tonga, Wallis.
„ <i>biconifera</i> , Fairm. . . .	×			Fiji.
„ <i>eludens</i> , n. . . . .	×	×		
ITHYPORINAE				
<i>Cranopoeus turritus</i> , n. . . .	×			
<i>Spanochelus planirostris</i> , n. . .	×			
CRYPTORRHYNCHINAE				
<i>Anaballus amplicollis</i> , Fairm. . .	×			Fiji, Tahiti, New Caledonia.
<i>Elytroteinus subtruncatus</i> , Fairm. .	×			Fiji, Honolulu.
<i>Acalles samoanus</i> , n. . . . .	×			
<i>Microcryptorrhynchus analis</i> , n. .	×			
„ <i>subscutellatus</i> , n. . . .	×			
„ <i>glomus</i> , n. . . . .	×	×		
<i>Phanerostethus dilophus</i> , n. . .	×			
<i>Deretiosus scutiger</i> , n. . . . .	×			
„ <i>gibber</i> , n. . . . .	×			
„ <i>wilderi</i> , n. . . . .		×		
<i>Deretiodes swezeyi</i> , n. . . . .		×		
<i>Teleodactylus roscidus</i> , n. . . .	×			
<i>Chaetectorus tutuilae</i> , n. . . .		×		
<i>Rhadinomerus atomosparsus</i> , Fairm.		×		Fiji.
<i>Orochlesis nigrofasciata</i> , Mshl. .	×		×	
<i>Trigonopterus crinipes</i> , n. . . .	×		×	
„ <i>submetallicus</i> , Mshl. . . .	×	×	×	
„ <i>caesipes</i> , n. . . . .	×			
„ <i>aeneoniveus</i> , Fairm. . . . .	×		×	
„ <i>bicolor</i> , Mshl. . . . .		×		
„ <i>serratipes</i> , n. . . . .			×	
„ <i>bryani</i> , n. . . . .		×		
„ <i>samoanus</i> , Heller . . . . .	×			
„ <i>binotatus</i> , Mshl. . . . .		×		
<i>Ampagia cribrellicollis</i> , Fairm. .	×	×	×	
„ <i>semisuturalis</i> , n. . . . .	×			
ZYGOPINAE				
<i>Mecopus trilineatus</i> , Guér. . . .	×			New Ireland, Fiji, Tonga, New Hebrides.
BARIDINAE				
<i>Eremonyx samoanus</i> , n. . . . .	×	×		
„ <i>rufoplagiatus</i> , n. . . . .		×		

	UPOLU.	TUTUILA.	SAVAII.	FURTHER DISTRIBUTION.
BARIDINAE—continued.				
<i>Omobaris lucens</i> , n. . . .	×			
<i>Nesobaris tutuilae</i> , n. . . .		×		
„ <i>parvungulis</i> , n. . . .	×			
CALANDRINAE				
<i>Diathetes buxtoni</i> , n. . . .	×			
„ <i>lyriger</i> , n. . . .	×			
<i>Cosmopolites sordidus</i> , Germ. . . .	×	×		Throughout the Tropics.
<i>Rhabdocnemis obscura</i> , Boisd. . . .	×	×		Celebes to the Pacific, Australia.
<i>Polytus mellerborgi</i> , Boh. . . .	×			Seychelles to the Pacific.
<i>Calandra oryzae</i> , L. . . .	×			Cosmopolitan.
<i>Diocalandra taitensis</i> , Guér. . . .	×	×		Fiji, Tonga, Wallis.
„ <i>frumenti</i> , F. . . .		×		East Africa to Papua.
COSSONINAE				
<i>Dryophthorus muscosus</i> , n. . . .	×			
„ <i>armaticollis</i> , n. . . .			×	
<i>Glyphostethus cancellatus</i> , Mshl. . . .	×			
<i>Pentarthrum cylindricum</i> , Woll. . . .	×			Widely distributed in the Tropics.
„ <i>hirticolle</i> , n. . . .	×			
„ <i>naucum</i> , n. . . .	×			
<i>Dynatopechus rubronotatus</i> , n. . . .	×			
<i>Gitonischius tubicollis</i> , n. . . .		×		
<i>Stenotrupis myristicae</i> , n. . . .		×		
<i>Microtribus longiceps</i> , n. . . .		×		
<i>Phloeophagosoma carinirostre</i> , n. . . .	×	×	×	
<i>Pseudolus longulus</i> , Boh. . . .	×	×		Hawaii, Tonga, Marquesas, Pitcairn I.
<i>Oxydema fusiforme</i> , Woll. . . .	?			Mascarenes, Ceylon, Hawaii, Marquesas.
„ <i>simplex</i> , n. . . .	×			
<i>Aphanocorynes savaiiensis</i> , n. . . .			×	
„ <i>humeralis</i> , n. . . .	×	×		
<i>Notiosomus cervicalis</i> , n. . . .	×			
<i>Cossonus platyrrhinus</i> , n. . . .	×			
„ <i>dentipes</i> , Mshl. . . .	×	×		
„ <i>limbaticollis</i> , Mshl. . . .		×		
„ <i>quaerens</i> , n. . . .	×	×	×	
<i>Proëces praeustum</i> , n. . . .		×	×	
<i>Mystrorrhinus dimorphus</i> , n. . . .	×	×		
<i>Rhyncolosoma subsignatum</i> , n. . . .	×			
<i>Ochronanus pumilus</i> , n. . . .	×	×		
<i>Stereoderus binodifrons</i> , Mshl. . . .	×		×	
<i>Rhyncolus samoanus</i> , Mshl. . . .	×	×		
„ <i>fuscicollis</i> , n. . . .		×		

From this statement it will be seen that only 8 of the species are known to occur outside the Pacific islands, and of these all except one (*Pentarthrum cylindricum*, Woll.) are associated with cultivated plants, and have therefore probably been introduced by human agency.

Of the remaining 78 species only 9 occur also in other islands of the Pacific, so that no less than 69 (80 per cent.) must at present be regarded as being peculiar to the Samoan Islands.

When we turn to the genera, we find that 15 (*Cylas*, *Rhynchaenus*, *Acalles*, *Mecistocerus*, *Mecopus*, *Cosmopolites*, *Calandra*, *Diocalandra*, *Dryophthorus*, *Pentarthrum*, *Stenotrupis*, *Phloeophagosoma*, *Cossonus*, *Proëces*, *Rhyncolus*) are widely distributed in other regions, these being principally COSSONINAE and CALANDRINAE. Of the remaining genera that are also found outside of the Pacific islands, 6 occur throughout the Indo-Australian Region (*Deretiosus*, *Chaetectetorus*, *Trigonopterus*, *Ampagia*, *Diathetes*, *Rhabdocnemis*); 9 occur only in the Oriental and Papuan Sub-regions (*Trigonops*, *Acicnemis*, *Orochlesis*, *Omobaris*, *Polytus*, *Oxydema*, *Rhyncolosoma*, *Ochronanus*, *Stereoderus*); 3 occur only in Australia (*Microcryptorrhynchus*, *Aphanocorynes*, *Notiosomus*); one in New Zealand (*Microtribus*); and one in South America (*Anaballus*).

There thus remain 20 genera that are restricted to the Pacific islands, namely : *Ottinychus*, *Sphaerorrhinus*, *Elytrurus*, *Nodocnemus*,\* *Hesychobius*, *Amblycnemus*,\* *Nesendaeus*,\* *Cranopoeus*, *Spanochelus*,\* *Elytroteinus*, *Phanerostethus*,\* *Deretiodes*,\* *Teleodactylus*,\* *Eremonyx*, *Nesobaris*, *Glyphostethus*,\* *Dynatopechus*, *Gitonischius*,\* *Pseudolus*, and *Mystrorrhinus* \*; and of these the 10 marked with an asterisk are known only from the Samoan Islands.

These data suggest that the Samoan fauna has been derived from the Malay Archipelago by way of New Guinea, and not from the south; for the three genera mentioned as occurring elsewhere only in Australia belong to groups that have not yet been adequately searched for in New Guinea, and their occurrence in that country may be anticipated with some degree of assurance.

As to the relationship of the Samoan fauna to those of the other Pacific groups, there is as yet too little information to enable us to come to any satisfactory conclusions. All that can be said is that the present indications are that its closest affinities are with Fiji, for of the ten Pacific genera that also occur outside of Samoa, all are to be found in Fiji. However, when the insects of Tonga and Tahiti are better known, it seems probable that they will show an even closer relationship to those of Samoa.



It is interesting to note the marked paucity in Samoa of the leaf-eating groups, represented by the first six sub-families. The sub-cortical COSSONINAE are the most dominant group (28 species), constituting one-third of all the species, this being apparently a usual feature in tropical and sub-tropical islands. The next most numerous group is the CRYPTORRHYNCHINAE (26 species), which mostly frequent the bark of trees and shrubs. These weevils attain their greatest development in tropical forests, especially in the Indo-Australian Region and America ; but for some unexplained reason they are not nearly so numerous, in proportion to other sub-families, in Africa.

The types of the new species described below are in the British Museum (Natural History), unless otherwise stated.

#### BRACHYDERINAE.

##### *Ottinychus*, gen. nov.

In Dr. K. M. Heller's revision of the genera of the tribe OTTISTIRINI (*Wien. Ent. Zg.*, xlii, p. 57, 1925), the species for which this new genus is proposed have the characters of *Ottistira*, Pasc., 1875 ; but they differ from this and from all the other genera of the tribe in having only a single claw to the tarsi—an unusual character. *Ottistira* differs, moreover, in having the epistome delimited posteriorly by a transverse furrow, whereas this furrow is entirely absent in *Ottinychus*, a condition that is found in only one other genus of the group, the monotypic *Tistortia*, Hllr. 1925. Apart from its tarsal claws, the latter genus differs from *Ottinychus* in having the inter-scrobal space on the dorsum of the rostrum nearly as wide as the forehead, whereas in *Ottinychus* it is about half that width.

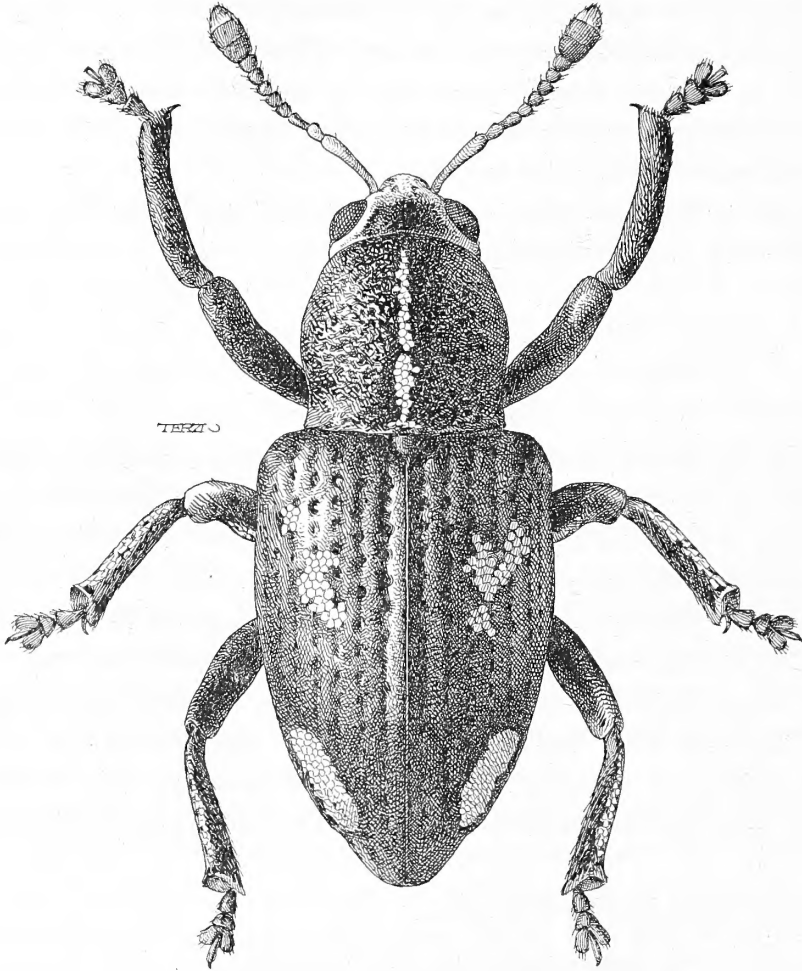
Genotype, *Ottinychus buxtoni*, sp. n.

Specimens of this genus have been seen from Fiji.

##### 1. *Ottinychus buxtoni*, sp. n. (Text-figs. 1, 2).

♂♀. Derm dull black or piceous, with indistinct, blackish scaling and markings of green scales ; the rostrum with green scales on the basal half of the dorsum and on the genae ; the head with a ring of green round the eyes, and a few green scales in the middle of the forehead ; the prothorax, with the pleurae (except near the base) and a narrow median dorsal stripe, green ; each elytron with the

following green markings: a very variable, macular patch before the middle (often broken up into separate spots, but never reaching the base), an elongate, oblique, sub-elliptical patch at the top of the declivity between striae 1 or 2 and 6, and a short stripe on the lateral margin at the apex; a large, fairly dense



TEXT-FIG. 1.—*Ottinychus buxtoni*, sp. n.

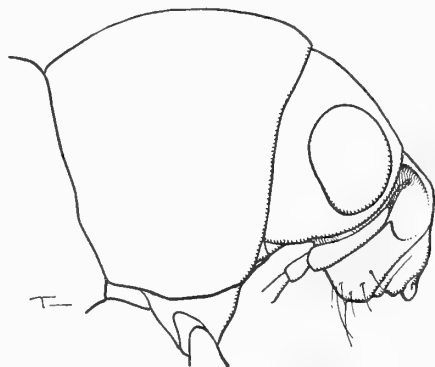
green patch on each side of the metasternum, and a few green scales at the sides of the two basal ventrites.

*Head* with the coarse punctation partly concealed by the scaling; the forehead almost flat and about as broad as the width of an eye, and the space between the eye and the prothorax less than the width of the scrobe in its basal part; the eyes large, almost circular, and more convex than the head. *Rostrum*

(without the mandibles) much broader than long and shorter than the head, the dorsal profile forming an almost continuous line with the forehead in the basal half and steeply declivous in the apical half, which is devoid of scales and bears a few coarse punctures; the dorsal (longitudinal) portion of the scrobe very short and broad, being much broader than the space between itself and the eye, the downward portion almost as broad as the narrowest part of the gena, which is unusually narrow. *Antennae* red-brown; the scape rather stout, curved and gradually clavate; the funicle with joint 1 slightly longer and much thicker than 2, joints 3 and 4 about as long as broad, the remainder slightly transverse. *Prothorax* slightly broader than long (7 : 6), rounded at the sides, widest at the middle, the basal margin truncate and distinctly wider than the apex, which is arcuate; the dorsum gently convex longitudinally and set throughout with rather coarse punctures, each containing a very short recumbent seta. *Scutellum* small, punctiform, with dense grey scaling. *Elytra* ovate, widest at the prominent and rounded-rectangular shoulders, gradually narrowing behind, and laterally constricted before the apex, which is more produced in ♀ than in ♂; the striae deep, the contained punctures larger near the base than those on the pronotum, but diminishing behind; the intervals rather broader than the striae, smooth and without granules or prominences, interval 1 being somewhat raised from before the middle to the declivity; a single row of very minute, recumbent setae on each interval. *Legs* rather stout, black, with fairly dense green scaling on the outer face of the femora and on the dorsal edge of the tibiae; the tibiae only slightly compressed, the external apical angle projecting sharply on the posterior pairs; the second tarsal joint not overlapping the base of the third. *Sternum* with the mesosternal process broader than long, truncate at the apex, bare and coarsely punctate.

Length : 2.1–3.0 mm.; breadth, 0.9–1.2 mm.

Upolu : Malololelei, 2,000 ft., 6 ♂♂, 2 ♀♀, vi.1924, 1 ♂, 18.iv.1925.



TEXT-FIG. 2.—*Ottinychus burtoni*, sp. n., lateral view of head and prothorax.

2. *Ottinychus hopkinsi*, sp. n.

♂♀. Derm testaceous brown to piceous, densely covered above with light brown scaling, which has a more or less coppery reflection, the colouring being occasionally almost uniform, but usually with very variable, indefinite, dark brown markings on the elytra and with two ill-defined, admedian, darker, longitudinal stripes on the pronotum; the sternum (except the middle of the metasternum) and the basal and lateral margins of the venter with pale, opalescent scaling.

*Head* with the sculpture entirely hidden by the scaling; the forehead somewhat flattened, about as broad as the width of an eye, and the space between the eye and the prothorax much greater than the width of the basal part of the scrobe; the eyes very broadly ovate and scarcely more convex than the head. *Rostrum*, in its general shape, like that of *O. buxtoni*, but rather longer and with the apical slope somewhat less steep; the dorsal portion of the scrobe short and about as broad as the space between itself and the eye, the downward portion not one-third the width of the narrowest part of the gena and hardly so wide as the space between the scrobe and the eye; the genae much broader than in *O. buxtoni*. *Antennae* honey-brown; the scape curved, slender and rather abruptly clavate; the funicle with joint 1 a little longer than 2 + 3, joints 3-7 all transverse and becoming progressively wider. *Prothorax* slightly broader than long (8 : 7), rounded at the sides, widest a little beyond the middle, subtruncate or feebly bisinuate at the base and much narrower at the apex, which is gently arcuate; the dorsum slightly convex longitudinally, closely and strongly punctate throughout (less coarsely so than in *buxtoni*), but the punctures partly obscured by the scaling (except in the middle) and each containing a minute, recumbent seta. *Scutellum* minute, punctiform, slightly elevated. *Elytra* ovate, widest a little behind the shoulders, which are oblique and much less prominent than in *buxtoni*, separately rounded at the base, feebly constricted laterally behind, and with the apical region not produced; the striae narrower and shallower than in *buxtoni*, the contained punctures smaller and partly hidden by scaling; the intervals much broader than the striae, even, densely squamose, and without obvious setae; the suture somewhat elevated on the declivity. *Legs* stout, red-brown, densely squamose; the tibiae markedly compressed in the apical half, so that the dorsal edge is there sub-carinate, and the external apical angle rounded off on the posterior pairs; the tarsi with the second joint over-



lapping the base of the third. *Sternum* with the mesosternal process longer than broad, rounded at the apex, and densely squamose.

Length: 2.4–3.0 mm.; breadth, 1.0–1.2 mm.

Upolu: Malololelei, 2,000 ft., 10 ♂♂, 4 ♀♀, vi.1924.

#### OTIORRHYNCHINAE.

### 3. *Sphaerorrhinus puncticollis*, Marshall.

*Proc. Hawaiian Ent. Soc.*, iv, p. 585, 1921.

Tutuila: centre of island, 700–1,200 ft., vi.–ix.1918 (Kellers—type); Pago Pago, 2 ♂♂, 30.ix.1923 (Swezey and Wilder), 3 ♂♂, 3 ♀♀, iv.1924 (Bryan), 1 ♂, 14.xii.1925.

Manu'a: Ofu, 2 ♂♂, 1 ♀, 27.ii.1926 (Judd).

The specimens from Manu'a differ in having the scaling pale, metallic green instead of greyish white.

### 4. *Sphaerorrhinus mutans*, sp. n.

♂. Derm black; the rostrum with thin grey scaling; the head with sparse brown scaling, becoming paler and denser adjoining the eyes; the pronotum with black scaling and an indefinite, bilateral stripe of pale fawn or grey extending from the basal angle to two-thirds of the length; the elytra with black scaling and with the following pale fawn or grey markings: a large, irregular patch between striae 2 and 7, extending from a little before the middle to the top of the declivity and curving inwards behind, a small spot at the basal angle adjoining the thoracic stripe, and a broad, common, V-shaped patch at the apex, which sometimes joins the discal patch and sometimes is absent; the underside with irregular, sparse, fawn or grey scaling.

*Head* with strong and close, but not confluent, punctation; the eyes moderately prominent. *Rostrum* with the declivous, anterior portion (without the mandibles) shorter than the horizontal basal part, flat, and with sparse, fine punctures; the basal part with coarse punctures that are normally hidden by scaling, leaving a very narrow, smooth, median line. *Antennae* red-brown, with the scape moderately curved, gradually clavate, and with sparse, small, round scales (often abraded) and sub-recumbent, pale setae; the funicle with all the joints longer than broad, the order of relative length being: (1, 2), 3, (4, 5, 6, 7). *Prothorax* about as long as broad, parallel-sided close to the base, strongly

rounded anteriorly, widest a little beyond the middle, and with the apex only slightly narrower than the base; the sides compressed at the base, and with a short, longitudinal fold above the compression; the whole surface strongly and closely punctate, leaving a very narrow, variable, smooth, median line in the basal half, the interspaces everywhere (including the pleurae) narrower than the punctures, each of which contains a minute, transversely recumbent seta. *Elytra* ovate, widest before the middle, rapidly and regularly acuminate behind, only slightly constricted laterally before the apex; the dorsal outline moderately convex, not continuous with that of the pronotum, the posterior declivity not very steep; the ten rows of deep, separated punctures are fairly regular and not striate, but behind the middle there are additional, confused punctures between rows 7 and 9, the punctures separated in the rows by at least their own length and almost concealed where the scaling is pale; the intervals broad and smooth, interval 3 having at the top of the declivity a slight elevation that bears a few minute, recumbent, white setae; similar longer setae irregularly scattered on the declivity. *Legs* red-brown, with black scaling and sparse, sub-recumbent, pale setae; the femora with scattered, pale scales towards the base and apex, and with a dense, pale patch on the lower surface of the clavate portion.

♀. Much broader than the ♂, with the elytra narrowing more gradually behind to near the apex, where they are sharply constricted, the apical portion being abruptly acuminate and the declivity steeper. The black scales of the ♂ are largely or entirely replaced by grey or fawn, so that the pale patches are much less conspicuous or even quite obliterated. On intervals 3, 5, 6, 7 there are several variable, small, obtuse elevations (especially about the top of the declivity), which bear small tufts of erect, white setae, the tufts on interval 3 being longer than the others.

Length: ♂ 3.9–4.2 mm., ♀ 4.5–5.4 mm.; breadth, ♂ 1.8–1.9 mm., ♀ 2.4–2.7 mm.

Upolu: Malololelei, 2,000 ft., 19 ♂♂ (type), 35 ♀♀, iii., iv., xi.1924; Aleipata (sea-level), 1 ♀, iv.1924.

Allied to *S. puncticollis*, Mshl. 1921, which, however, differs in having much finer punctures on the elytra,\* these being much smaller than those on the pronotum; whereas in *mutans* the punctures are almost similar on these two areas. Again, the ♀ of *puncticollis* has no elevations or erect setae on the elytra.

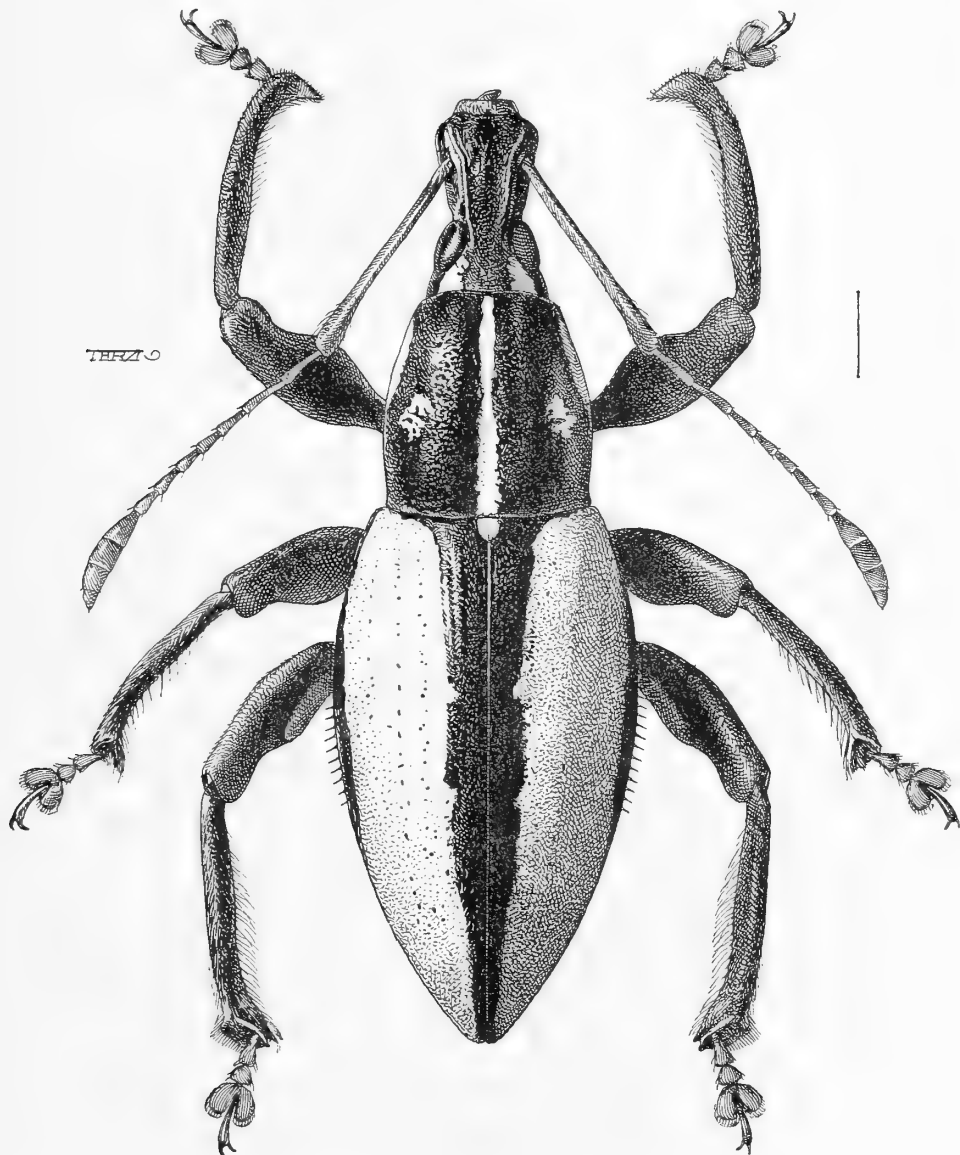
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\* In the original description (*loc. cit.*) these punctures are described as “finely” separated; this is a misprint for “widely.”

5. *Elytrurus samoensis*, Marshall.

*Proc. Hawaiian Ent. Soc.*, iv, p. 587, 1921.

The typical specimens were labelled Samoa, without any precise locality, and the species is not represented in the collections now being dealt with.



TEXT-FIG. 3.—*Elytrurus bicolor*, Marshall, ♂.

6. *Elytrurus bicolor*, Marshall (Text-fig. 3).*Proc. Hawaiian Ent. Soc.*, iv. p. 588, 1921.*E. bivittatus*, Marshall, *loc. cit.* (n. syn.).

Upolu : Malololelei, rain forest, 2,000 ft., 2 ♀♀, 26.iv.1924 (Bryan), 5 ♂♂, 5 ♀♀, iv., vi., vii.1924 ; Apia, 1 ♂, 7.vii.1925 (Wilder).

Savaii : Safune, 1 ♂, 1 ♀, v.1924 (Bryan).

Tutuila : Leone Road, 1 ♂, 24.iii.1926 (Judd).

With the series now before me I cannot doubt that, in spite of its very different appearance, *E. bivittatus* is merely the male of *bicolor*.

7. *Trigonops spongicollis*, Fairmaire.*Rev. Zool.*, (2) i, p. 505, 1849.

Upolu : Aleipata, 3 ♂♂, 3 ♀♀, iv.1924.

Savaii : 1,000 ft., 1 ♂, 1 ♀, 21.ix.1925.

Tutuila : Amauli, 1 ♀, 6.ix.1923 (Swezey and Wilder) ; Lauili, 3 ♀♀, 31.iii.1926 (Judd).

Originally described from Tahiti.

## ERIRRHININAE.

*Nodocnemus*, gen. nov.

*Head* pyriform ; eyes somewhat convex, their curvature not continuous with that of the temples ; frons narrower than the base of the rostrum. *Rostrum* elongate, deflected, dorso-ventrally compressed beyond the antennae, which are inserted at one-third from the apex in both sexes, with the apical margin subtruncate ; scrobes entirely lateral and extending to the eyes ; mandibles sharply tricuspid, decussate. *Antennae* elongate and slender ; scape reaching the eye, clavate ; funicle 7-jointed ; club elongate, elliptical, unsegmented. *Prothorax* transverse, sub-conical, almost as wide at the base as the elytra, not marginate laterally. *Scutellum* distinct. *Elytra* not fitting very closely to the abdomen posteriorly, separately rounded at the apex and leaving the pygidium rather broadly exposed, and with nine rows of punctures. *Legs* with the femora strongly clavate and unarmed ; tibiae straight, without any trace of an apical mucro, the corbels of the posterior pairs slightly ascending the dorsal edge ; tarsi broad, the claws simple and divaricate. *Sternum* with the front coxae distinctly separated and close to the hind margin of the prosternum, which is



elongate in front of the coxae ; the meso-sternal process nearly twice as broad as long, as wide as a coxa, and broadly truncate behind ; the mesepimera much larger than the mesepisterna and widely separating them from the elytral margin ; the mesosternum between the coxae longer than a median coxa. *Venter* strongly convex transversely, with the intercoxal process broad and obtusely angulate ; ventrite 1 with the apical margin deeply sinuate in the middle, and 2 medianly as long as 3 + 4.

Genotype : *Nodocnemus subfasciatus*, sp. n.

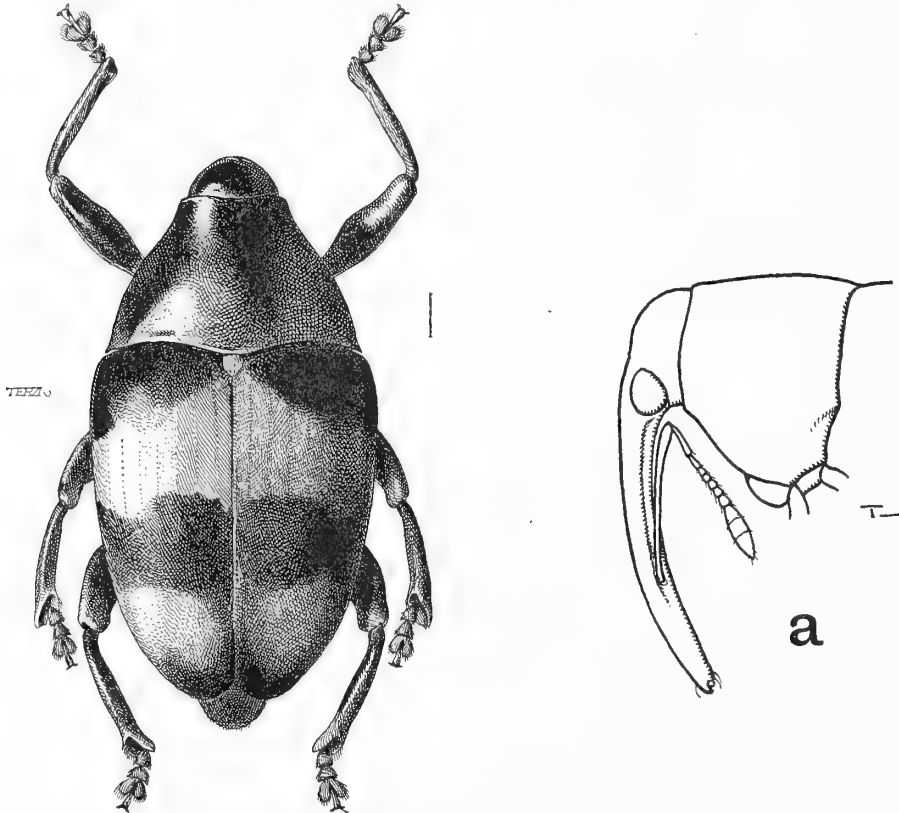
The species for which this genus is proposed is a somewhat aberrant and comparatively soft-bodied insect ; but in spite of the lack of the lateral margins on the prothorax and the exposed pygidium, there can be no doubt that it should be placed in the tribe DERELOMINI, and in these two characters it agrees with the otherwise very different-looking *Derelomorphus*, Mshl. 1928, from Malaya. The solid antennal club is a very unusual character in the ERIRRHININAE.

#### 8. *Nodocnemus subfasciatus*, sp. n. (Text-fig. 4).

♂♀. Colour dull black, clothed above with fine, recumbent, blackish pubescence, with markings formed of similar grey pubescence ; pronotum with the sides very broadly and indefinitely grey ; elytra with a common broad, sinuated grey band before the middle, attaining the lateral margins and produced forwards in the middle so as to reach the scutellum on the suture, and a large, transverse, sub-apical grey patch extending from stria 1 almost to the lateral margin ; the lower surface thinly clothed throughout with grey pubescence.

*Head* slightly constricted behind the eyes, closely punctate, the punctures becoming smaller and denser anteriorly, and entirely bare ; the frons somewhat flattened and with a short median sulcus. *Rostrum* slightly shorter than the basal width of the pronotum, strongly curved, parallel-sided from the base to the antennae, and thence gradually dilated to the apex, closely set with fine, elongate punctures, which are sparser near the apex, and with a short, fine, median stria between the antennae ; in the basal half or basal third two very feeble, narrow carinae, which unite at the base ; scrobes entirely invisible from above. *Antennae* red-brown, with the basal half of the club blackish ; funicle with joint 1 nearly as long as 2-4, 2 as long as 3+4, 2 and 3 longer than broad, 4-7 moniliform and

about as long as broad. *Prothorax* only slightly longer than half the basal width (11 : 21), widest at the base (which is more than twice as wide as the apex), gradually narrowing from the base to near the middle; then more rapidly rounded, and shallowly sub-tubulate at the apex ; the base bisinuate and with the angles acutely produced backwards, the apex truncate dorsally and vertical laterally ; dorsum almost flat longitudinally, evenly covered throughout with dense, small punctures ; the basal margin with a distinct carina in the middle, which gradually



TEXT-FIG. 4.—*Nodocnemus subfasciatus*, sp. n., ♂ ; a, lateral view of head and prothorax.

disappears laterally. *Scutellum* shield-shaped, with grey pubescence. *Elytra* ovate, only slightly wider at the obliquely rounded shoulders than the base of the prothorax, rather rapidly narrowing from behind the shoulders to the broadly rounded apex, and without any posterior calli or constriction ; the regular rows of fine, separated punctures scarcely striate, the intervals broad, flat and finely shagreened. *Legs* black, finely shagreened and with thin, grey pubescence ; tarsi with joint 2 transverse and shorter than 3, the claws testaceous brown.

*Pygidium* of ♂ with dense, shallow, sub-confluent punctures, broadly rounded at the apex, and without any impression; that of ♀ more narrowed behind, and with a shallow, median longitudinal impression near the apex.

Upolu : Malololelei, 1 ♂, 2 ♀♀, in flowers of a native palm, 5.xii.1925.

### *Hesychobius*, gen. nov.

*Head*, globular, the forehead somewhat narrower than the base of the rostrum; the eyes rather narrowly separated beneath, their curvature continuous with that of the head. *Rostrum* elongate, deflected, stouter than the club of the front femora; the scrobes deep, straight, oblique, not uniting at the base, and almost reaching the apex; the mandibles decussate and bidentate; the mentum transverse, smooth and resting on a broad peduncle. *Antennae* inserted near the apex of the rostrum; the scape slender, cylindrical and reaching the eye; the funicle 7-jointed, with the two basal joints elongate and equal; the club ovate. *Prothorax* bisinuate at the base, with feeble post-ocular lobes, which partly conceal the eyes, and the gular margin broadly sinuate. *Scutellum* distinct. *Elytra* oblong-ovate, much wider at the shoulders than the prothorax, separately rounded at the base, with ten complete striae. *Legs* slender; the femora strongly clavate and with a sharp tooth, the hind pair not reaching the apex of the elytra; the tibiae with a long apical mucro; the tarsi with joint 2 transverse and 4 elongate; the claws large, simple and divaricate. *Sternum*: the front coxae inserted far behind the middle of the prosternum; mesepisterna separated from the elytra by the mesepimera; metasternum elongate, its episterna broad and parallel-sided. *Venter* with the intercoxal process ogival; ventrite 2 separated from 1 by a sinuate incision and as long as 3+4.

Genotype, *Hesychobius nebulosus*, sp. n.

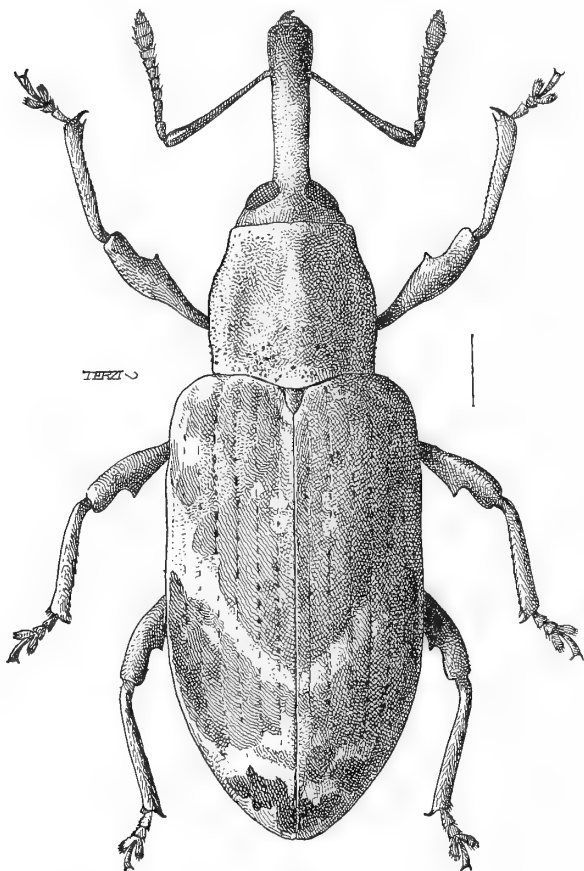
The nearest ally of this genus appears to be the palaearctic *Procas*, Steph., with which it agrees according to Lacordaire's key. *Procas* differs, however, *inter alia*, in having the femora unarmed, the eyes widely separated beneath, the scrobes parallel with the long axis of the rostrum, and the elytra jointly sinuate at the base.

I have seen a very closely allied species from Fiji.

9. *Hesychobius nebulosus*, sp. n. (Text-fig. 5).

♂. Derm red-brown to piceous, densely squamose on the upper surface, and almost entirely bare beneath; the head and rostrum with pale buff scaling; the pronotum buff on the disk, gradually turning to white at the sides and with a very faint, narrow median paler stripe, the lower edge of the lateral squamose area

sharply defined and with a strong, downward angulation at the middle; the elytra with the intervals on the inflexed margins bare from the base to the level of the apex of ventrite 3, except for a large patch of white scales adjoining the metasternum; the dorsum buff or greyish, with a very ill-defined, oblique, whitish stripe from behind the shoulder to the suture near the top of the declivity, becoming narrower and very indistinct posteriorly, and with some indefinite, whitish mottling on the apical area and around the shoulders; underside with a few rounded, white scales on each side of the two basal ventrites, and sometimes a patch of buff or grey scales on each side of the metasternum, all the punctures bearing a short, white, recumbent seta.



TEXT-FIG. 5.—*Hesychobius nebulosus*, sp. n., ♂.

*Head* with dense, fine punctation and a few rather larger punctures, all normally hidden by scaling; the forehead rather abruptly flattened anteriorly and with a small median forea. *Rostrum* about as long as the head and pronotum, gently curved, sub-cylindrical from the base to the antennae, the apical area distinctly broader but parallel-sided; the dorsum convex transversely, finely and closely punctate, and with numerous, much larger punctures (partly hidden



by scaling); between the antennae a short median sulcus and a fine, oblique carina on each side of it. *Antennae* with the scape gently curved, gradually clavate and sparsely setose; joint 3 of the funicle longer than broad, 4 and 5 as long as broad, 6 and 7 transverse. *Prothorax* as long as broad, parallel-sided from the base to the middle, and narrowing rather rapidly in front without any marked constriction, shallowly bisinuate at the base, the apex truncate dorsally; the disk flattened in the middle of the basal half, with very fine, close punctation throughout and irregular, large, shallow punctures; the sculpture hidden by scaling and sparse, short, recumbent setae. *Scutellum* sub-quadrate, bare. *Elytra* slightly arcuate separately at the base, parallel-sided from the roundly prominent shoulders to beyond the middle, slightly dehiscent at the apex, and with the posterior callus obsolescent; the striae appearing fine and shallow through the scaling and narrower than the punctures; the intervals with concealed, minute punctation, and each with a row of very short, recumbent setae, which on intervals 1-3 are borne on minute, concealed granules.

Length, 6.0-7.8 mm.; breadth, 2.4-3.3 mm.

Samoa: 1 ♂ (Deutsch. Ent. Inst.).

Upolu: Malololelei, 2,000 ft., 2 ♂♂, 24-25.ii.1924 (type).

#### APIONINAE.

##### 10. *Cylas formicarius*, Fabricius.

*Brentus formicarius*, Fabricius, *Ent. Syst. Suppl.*, p. 74, 1798.

*Cylas turcipennis*, Boheman, *Schönh. Gen. Curc.*, i, p. 369, 1833.

Tutuila: Pago Pago, 1 ♂, 20.ix.1923 (Swezey and Wilder).

This common pest of sweet potatoes is distributed practically throughout the tropics.

#### ANTHONOMINAE.

##### *Amblycnemus*, gen. nov.

*Head* sub-globular, with the frons rather narrower than the base of the rostrum; eyes widely separated beneath, their curvature continuous with that of the head. *Rostrum* elongate, moderately slender, with the antennae inserted much beyond the middle in both sexes; scrobes oblique, rapidly passing beneath the rostrum; mandibles dentate and decussate. *Antennae* elongate; scape slender, cylindrical and gradually clavate; funicle with only six joints; club rather loosely four-jointed. *Scutellum* small, but distinct. *Elytra* broadly

ovate, much broader at the sub-rectangular shoulders than the base of the prothorax, with ten striae (the tenth abbreviated), and without posterior calli; the suture curving to the left at the apex, so that interval 1 of the right elytron is there much broader than interval 1 of the left. *Wings* functional. *Sternum*: prosternum distinctly excavated in front of the coxae, and there slightly longer than behind the coxae, which are very narrowly separated, but the apical margin hardly sinuate; mesosternum with the side-pieces fused, the intercoxal process sloping forward, broadly truncate behind, being there nearly as wide as a coxa; metasternum between the coxae about as long as the median coxa and tumid, with three rounded impressions along the hind margin, and the episternal suture very fine, but complete. *Legs* rather long and slender; femora moderately clavate and unarmed, the hind pair reaching to about the apex of the elytra; tibiae sub-compressed, quite straight on the lower edge, with a fine, dorsal carina, and without any trace of an apical mucro; tarsi with joint 1 as long as 2+3, 2 trapezoidal, 3 longer than 2, very broad and deeply bilobate, the claws divaricate and obtusely appendiculate at the base. *Venter* with the intercoxal process gently arcuate and about as broad as one of the coxae, which do not reach the elytra; ventrite 1 fused in the middle with 2; 2 as long as 3+4.

Genotype, *Amblycnemus stevensoni*, sp. n.

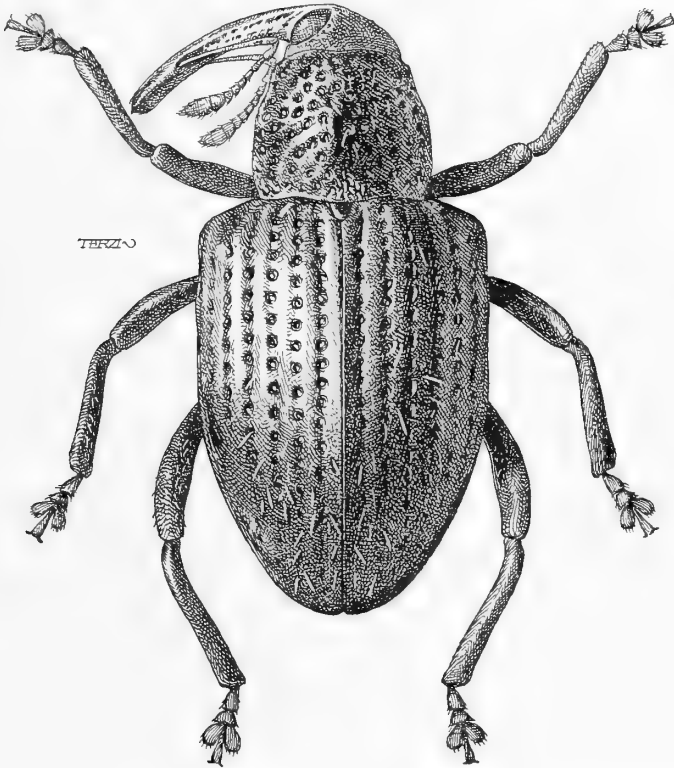
A somewhat aberrant genus, perhaps nearest to the African *Thamnobius*, Schönh. 1836, but differing from all the other genera of the sub-family known to me in its excavate prosternum and narrowly separated front coxae. The complete absence of an apical mucro on the tibiae is also an unusual character (the only other case in the sub-family known to me being the genus *Euclyptus*, Dietz 1891), and this, together with the 6-jointed funicle, the very broad, mesosternal process, and the fusion of the two basal visible ventrites, sufficiently distinguish the genus.

#### 11. *Amblycnemus stevensoni*, sp. n. (Text-fig. 6).

♂♀. Colour rather dull black, with a few scattered, elongate, white scales, mostly on the lower surface; rostrum often piceous or red-brown; antennae and tarsi testaceous brown.

*Head* with coarse, separated punctures, each containing a short, recumbent,

pale seta ; frons with a short median sulcus. *Rostrum* of ♂ as long as the head and pronotum, gently curved, parallel-sided in the basal half and then slightly widening to the apex, with the antennae inserted at one-fifth from the apex ; the dorsum with a distinct median carina and two shorter ones on each side, the intervening sulci opaque, obsoletely punctate and with rows of setiform scales, which are directed backwards on the dorsum and transverse laterally ; rostrum of ♀ a little longer, without any carinae or scales, and with the antennae inserted



TEXT-FIG. 6.—*Amblycnemus stevensoni*, sp. n., ♀.

at one-fourth from the apex ; the dorsum broadly impunctate down the middle (the area regularly widening from base to apex), with a single row of punctures on each side, and below this two shallowly punctate sulci. *Antennae* with the funicular joints successively diminishing in length, 1-4 longer than broad, 5 as long as broad, and 6 slightly transverse. *Prothorax* transverse, gently rounded at the sides, broadest behind the middle, broadly and shallowly constricted at the apex, the constriction not continued across the dorsum ; the apical margin

truncate dorsally and somewhat oblique laterally, the base shallowly bisinuate ; the dorsum slightly convex longitudinally, closely set with coarse punctures and with a broad, impunctate median line on the basal half, the punctures on the pleurae more sparse and irregular ; the dorsal punctures each with a small, recumbent, pale seta, and in the middle of the basal margin a transverse patch of small setiform scales ; the lower pleural punctures with comparatively large, ovate or lanceolate, white scales. *Scutellum* ovate, bare, opaque. *Elytra* ovate, almost parallel-sided from the prominent and roundly rectangular shoulders to the middle, jointly rounded and obtusely acuminate at the apex, and sloping rather steeply forwards at the extreme base ; the striae broad and strongly punctate, the punctures scarcely diminishing behind ; the intervals gently convex, about as broad as the striae, smooth and impunctate, with a few scattered, lanceolate white scales and sparse, recumbent, pale setae (apparently easily abraded). *Legs* with the femora rather coarsely but shallowly punctate, and with short, recumbent, white setae ; tibiae opaque, with a distinct dorsal carina and obsolescent lateral ones. *Venter* with the two basal ventrites shiny, the remainder opaque ; ventrite 1 with a coarsely punctate basal sulcus, and a few strong punctures on the disk of 1 and 2, sometimes forming two irregular, transverse rows on each ; the punctures on the remaining ventrites obsolescent.

Length : 2.2–2.3 mm. ; breadth, 1.2–1.3 mm.

Upolu : Apia, 1 ♂, x.1925 (Buxton and Hopkins—type), 1 ♀, on leaf of coconut on R. L. Stevenson's grave, 13.ix.1923 (Swezey and Wilder) ; Mt. Vaea, 1,500 ft., Apia, 1 ♂, 1 ♀, 20.xii.1924 ; Vailima, 1 ♀, 24.v.1924, 1 ♂, i.1925 ; Tuaeufu, 1 ♀, 16.ix.1923 (S. & W.) ; Vaea, 400 ft., 1 ♀, 25.iv.1924 (Bryan) ; Malololelei, rain forest, 2,000 ft., 1 ♀, 26.iv.1924 (Bryan).

Tutuila : Pago Pago, 1 ♂, 9.ix.1923 (Swezey and Wilder), 1 ♀, 14.xii.1925 (Buxton and Hopkins).

### Rhynchaenus, Clairv. 1798.

No species of these small, jumping weevils appears to have been recorded previously from the Pacific islands, but this is probably due to the fact that they have not been adequately collected. A good many species are known to me from the tropics of the Old World, but practically all of them are undescribed.

12. *Rhynchaenus samoanus*, sp. n.

♂♀. Derm piceous ; the head and prothorax thinly, the elytra more closely, covered with short, recumbent, grey setae, usually having a brassy reflection ; there are often variable, darker patches on the elytra where the setae are more sparse ; the underside with the setae very sparse, except on the side-pieces of the mesosternum and metasternum, where they are rather more dense than on the elytra.

*Head* with the eyes quite contiguous and only slightly projecting from the head. *Rostrum* nearly as long as the head and pronotum, stout, moderately curved, with the antennae inserted at one-third from the base in the ♀ and nearer the middle in the ♂, and the basal portion with five carinae. *Antennae* testaceous ; the funicle with six joints, the order of length being : 1, 2, 3 (4, 5, 6), the last three transverse. *Prothorax* transverse, widest actually at the base, rapidly narrowing with a curve to the apex, and without any sub-apical constriction ; the dorsum convex longitudinally (the apex lower than the base), closely set throughout with very shallow, confluent punctures, sometimes forming irregular, transverse wrinkles, and without any median longitudinal impression ; the setae lying longitudinally, except at the sides of the apex and base, where they are transverse ; no projecting lateral setae. *Scutellum* small, concolorous. *Elytra* broadly sub-elliptical, very oblique at the shoulders, broadly rounded at the apex, and without dorsal or sub-apical impressions ; the striae moderately deep, with shallow punctures each containing a recumbent seta ; the intervals broader than the striae and with very shallow, transversely rugose punctures ; the setae all recumbent and rather denser along the suture than elsewhere. *Legs* red-brown, with the hind femora and tibiae darker, and all the tarsi paler ; the hind femora very broad, with two minute, blunt teeth and a few erect setae along the lower edge.

Length : 2.0–2.4 mm. ; breadth, 0.9–1.1 mm.

Tutuila : Pago Pago, 1 ♂, 14.xii.1925 (Buxton and Hopkins—type), 1 ♀, 30.ix.1923 (Swezey and Wilder).

Savaii : Safune, 1 ♀, 3.v.1924, rain forest, 2,000–4,000 ft., 2 ♀♀, 5.v.1924, lower forest, 1,000–2,000 ft. (Bryan).

## TYCHIINAE.

## Nesendaeus, gen. nov.

*Head* with the eyes large, very convex, coarsely faceted; the forehead nearly as broad as the base of the rostrum. *Rostrum* rather narrow, elongate, somewhat compressed dorso-ventrally near the apex; the scrobes straight and running obliquely to beneath the base of the rostrum; the mandibles bidentate, decussate. *Antennae* inserted beyond the middle of the rostrum; the scape reaching the eye, slender, straight, clavate; the funicle 7-jointed; the club rather large, ovate. *Prothorax* of almost equal width at base and apex, with the gular margin truncate. *Elytra* ovate, much broader at the shoulders than the prothorax, with ten punctate striae (stria 10 abbreviated), not constricted behind, jointly rounded at the apex, and concealing the pygidium. *Wings* functional. *Sternum* with the front coxae contiguous and nearer to the base than to the apex of the prosternum. *Legs*: all the femora with a stout, sharp tooth; the tibiae widened in the distal half and with a small uncus on the anterior pairs; the tarsi short, with the claws appendiculate. *Venter*: ventrite 2 hardly as long as 3+4 and with its lateral, apical angle produced backwards.

Genotype, *Nesendaeus setolineatus*, sp. n.

This genus belongs to Lacordaire's group ELLESCHIDES, being nearly related to the African and Oriental genus *Endaeus*, Schönh. 1826, which differs in having only six joints to the funicle and the prothorax much narrower at the apex than at the base.

13. *Nesendaeus setolineatus*, sp. n. (Text-fig. 7).

♂♀. Uniform honey-brown, with the eyes black.

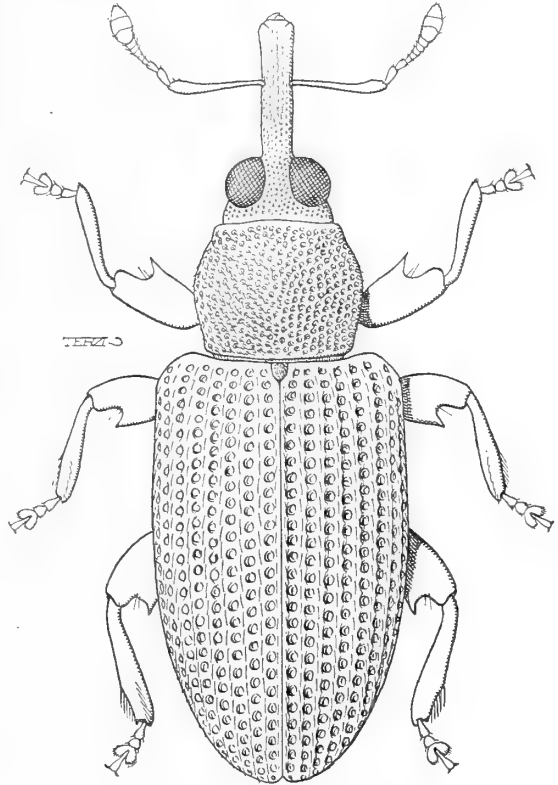
*Head* with strong, close punctation throughout and sub-recumbent pale setae. *Rostrum* of ♂ a little longer than the pronotum, almost straight, parallel-sided to the antennae, which are inserted at about one-fourth from the apex, slightly wider in the apical part, with four shallow rows of punctures and a fine, abbreviated median stria; of ♀, a little longer than the head and pronotum, more curved, with the antennae inserted at two-fifths from the apex, the punctation being almost similar to that in ♂. *Antennae* with the scape rather longer than the funicle; joint 1 of the funicle as long as 2+3+4, 2 longer than



broad (equal to 3+4), the rest transverse, 3-6 equal, 7 broader. *Prothorax* broader than long (5:4), strongly rounded at the sides, widest at the middle, only slightly narrower at the apex than at the base, and with the apical constriction almost obsolete; the dorsum flat longitudinally, closely punctate, with sparse, fine pubescence and transverse or oblique recumbent setae. *Scutellum* dark brown, bare. *Elytra* ovate, with the close punctures in the striae only slightly diminishing behind; the intervals broader than the striae, with minute, shallow punctures, sparsely pubescent, and each with a row of short, recumbent setae aligned so that the apex of one seta usually touches the base of the next. *Legs* finely pubescent; the femora with a small tuft of erect setae between the sharp, triangular tooth and the apex.

Length : 2.0-2.4 mm.; breadth, 1.0-1.1 mm.

Upolu : Malololelei, 2,000 ft., 1 ♂ (type), 22.xi.1924, 1 ♂, 18.iv.1925; Vailima, 600 ft., 1 ♀, 18.x.1924.



TEXT-FIG. 7.—*Nesendaeus setolineatus*, sp. n., ♀.

#### ACICNEMIDINAE.

##### 14. *Acicnemis variegata*, Fairmaire.

*Rev. Zool.*, (2) i, p. 511, 1849; *Ann. Soc. Ent. France*, (6) i, p. 298, 1881; Hubenthal, *Arch. Naturg.*, 83, A. 8, p. 158, 1919.

*A. alboguttata*, Chevrolat, *Pet. Nouv. Ent.*, i, p. 227, 1878.

*A. foveicollis*, Heller, *Denks. K. Akad. Wiss. Wien., Math.-Naturw. Kl.*, 89, p. 695, 1913; Hubenthal, *op. cit.*, A. 9, p. 53, 1919 (n. syn.).

In his revision of the genus *Acicnemis*, Hubenthal (*l.c.*) treats *A. foveicollis* as a distinct species occurring only in Samoa, whereas *A. variegata* is recorded

from Fiji, Tahiti, Tonga and Wallis Islands. But after careful examination of a fairly long series of specimens from Fiji, Samoa and Tahiti (type locality), it seems clear that the distinctions cited by Hubenthal are merely minor individual differences that are not even of sufficient importance to justify the use of a varietal name. The specimens in the present collection are from the following localities.

Upolu : Apia, 11 ♂♂, 10 ♀♀, iii.1924–xii.1925 ; Malololelei, 2 ♂♂, iv.1924 ; Aleipata, 1 ♂, xi.1924.

Tutuila : Amauli, 1 ♂, 5.ix.1923 (Bryan) ; Leone Road, 1 ♂, 7.ix.1923 (Swezey and Wilder), 1 ♀, 24.iii.1926 (Judd) ; Pago Pago, 8 ♂♂, 6 ♀♀, under rotten bark, ix.1923 (Swezey and Wilder), 1 ♂, 14.xii.1925.

### 15. *Acicnemis biconifera*, Fairmaire.

*Pet. Nouv. Ent.*, i, p. 286, 1878 ; *Ann. Soc. Ent. France*, (6) i, p. 302, 1881 ; Hubenthal, *Arch. Naturg.*, 83, A. 9, p. 56, 1919.

*A. kraatzi*, Hubenthal, *op. cit.*, p. 54 (n. syn.).

Upolu : Malololelei, 1 ♂, 2 ♀♀, ii, vii.1924.

There is in the British Museum a cotype female of *A. biconifera*, from Fiji, and through the kindness of Dr. Walther Horn I have been able to compare it with a female of *A. kraatzi* named by Hubenthal ; they are undoubtedly conspecific.

### 16. *Acicnemis eludens*, sp. n.

♂♀. Derm piceous, with dense, mottled, greyish-brown scaling above ; the prothorax with very indefinite, paler markings, including a transverse row of four rounded patches across the middle and two short, lateral stripes on each side of the base ; the elytra with the following markings on interval 1 : a dark brown, post-scutellar patch about as long as the scutellum, followed by a whitish stripe 1 mm. long, then a mottled brown and buff patch 0.6 mm. long ; immediately behind this a common, transverse, buff band uniting the tubercles on interval 3, and a very faint, common, V-shaped mark on the declivity ; the underside grey.

*Rostrum* as in *A. variegata*. *Antennae* with joint 2 of the funicle 1.7 times as long as 2, 3 and 4 longer than broad, 5–7 about as long as broad ; the club not stalked, elliptical in ♀, narrower and almost cylindrical in ♂. *Prothorax* transverse, rounded at the sides, widest at about the middle, narrowly constricted at the base and with the angles projecting slightly, strongly constricted and sub-

tubular at the apex; the dorsum evenly convex and without depressions or granules in either sex; the setae very small, quite recumbent and inconspicuous. *Scutellum* with coffee-brown scaling. *Elytra* much wider than the prothorax, slightly narrower in ♂ than in ♀, widest at the shoulders and gradually narrowing behind, with the lateral margins sinuate just before the apex, which is sub-truncate in both sexes and somewhat produced downwards like a beak in ♀; the striae usually rendered rather indistinct by the dense scaling and the punctures normally invisible; the usual posterior callus well developed, the intervals all similar, except for a low tubercle behind the middle on interval 3 (less distinct in ♂) and another close to the apex; the scaling overlapping, smooth; the setae small and quite recumbent. *Legs* with the hind femora not exceeding the apex of the elytra; all the femora slender at the base, more strongly clavate than in *A. variegata*, with a smaller and sharper tooth, the distal edge of which slopes less steeply and does not form a sharp knife-edge, but merely a low, uneven carina; the tibiae narrowing from the middle to the apex and without a sharp, projecting tooth at the inner apical angle, the front tibiae of ♂ with a thin fringe of long hairs on the apical half of the lower edge. *Venter* of ♂ with a large median impression on the two basal ventrites, and another on the anal ventrite devoid of scaling and set with dense, long, erect setae.

Length: 5.1–5.4 mm.; breadth, 2.1–2.3 mm.

Tutuila: Pago Pago, 1 ♂, under rotten bark, 21.ix.1923 (Swezey), 1 ♀, 2.xii.1924 (Buxton and Hopkins—type); Amauli, 1 ♀, 6.ix.1923 (Swezey and Wilder).

The ♂ cotype has the general colouring somewhat darker above and the markings almost obliterated, even the white patch on the elytra being shortened and indistinct. The Tutuila specimen is darker still, and the pale buff markings on the pronotum stand out conspicuously, the basal lateral stripes uniting with the discal spots, and there is an additional pale median stripe; on the dark brown elytra the whitish sutural patch has practically disappeared, the transverse buff band is broken into three spots, and there is an elongate buff patch on interval 6 behind the middle.

From the other two Samoan *Acicnemis* this species may be distinguished, *inter alia*, by the much more slender antennal club, the evenly convex and uniformly scaled pronotum, the complete absence of granules on the pronotum and elytra, the concealment of the punctures on the elytra, and the absence of the sharp, internal, apical tooth on the tibiae.

In Hubenthal's key to the genus (*op. cit.*) *A. eludens* runs down to *sannio*, Pasc. 1872, a New Guinea species, which is a much larger insect with a very different colour pattern ; it also differs, *inter alia*, in having the distal joints of the funicle much longer than broad and clavate, and the club shortly pedunculate ; on the pronotum the coarse punctures on the disk are visible, each containing a broad scale ; on the elytra the striae are distinct, and there is no trace of a tubercle on interval 3 ; the tooth on the femora is very large, with a knife-like distal edge.

16A. *Acicnemis eludens*, var. *signifera*, nov.

A single female taken at Malololelei, Upolu, 18.iv.1925, differs strikingly in colour from the Tutuila specimens, but no structural differences can be detected.

Head fawn-coloured, with a dark brown, V-shaped mark. Pronotum fawn, with a large, transverse, oblong patch of mottled fawn and brown scales at the base, a few scattered brown scales in front of it, and an oblique, lateral, brown stripe on each side of the anterior half. Elytra mottled grey and brown above, with a dark brown sutural patch from the base to the tubercles, not extending laterally beyond stria 2 except on the tubercles, and containing in its middle a conspicuous, whitish, oblong, sutural patch confined to interval 1 ; the lateral margins below stria 7 dark chocolate-brown, with sparse, white, recumbent setae, the brown colour encroaching irregularly on the disk before the middle. Under-side dark chocolate-brown, with sparse, whitish scales and a bilateral patch of fawn scaling on the two basal ventrites.

ITHYPORINAE.

*Cranopoeus*, gen. nov.

*Head* globular, immersed in the prothorax ; eyes lateral, short, oval, separated above by the width of the rostrum and even further apart beneath, and partly covered by the post-ocular lobes when the rostrum is retracted. *Rostrum* almost straight, slender, very elongate, with the antennae inserted at about one-third from the apex in ♂ and at about middle in ♀ ; the scrobes passing rapidly to the lower surface, but not uniting at base and not continued beyond the antennae ; mandibles strongly dentate and decussate. *Antennae* slender, elongate ; scape about as long as the funicle and club ; funicle 7-jointed and with

joint 1 much longer than 2; club 4-jointed, the sutures transverse. *Prothorax* transverse, almost concealing the head from above, with feeble, post-ocular lobes bearing short vibrissae. *Scutellum* minute or concealed. *Elytra* very short and broad, much broader at the shoulders than the prothorax, with ten deeply punctate striae (the 10th abbreviated), and without any posterior calli. *Wings* functional. *Sternum*: prosternum broadly and shallowly excavated in front of the contiguous coxae, and with its apical margin deeply sinuate; mesosternal process sloping forwards, plane, and broadly rounded behind; mesepimeron much smaller than the mesepisternum; metasternum much shorter between the coxae than the median coxa; metepisternum moderately broad and reaching the venter, the adjoining suture either complete or partly obliterated. *Venter* with the intercoxal process broadly rounded; ventrite 1 truncate behind, 2-4 sub-equal and with deep, straight sutures; pygidium entirely concealed. *Legs* with the femora clavate and unarmed, the hind pair not exceeding the elytra; tibiae compressed, finely uncinatate at the apex; tarsi with joint 3 longer than 2 and deeply bilobed, the claws small, connate at the base and strongly bent inwards.

Genotype, *Cranopoeus turritus*, sp. n.

The pronotum and elytra normally bear striking prominences formed from a waxy secretion.

In general facies very much like one of the small, sub-quadrate species of *Conotrachelus*, which, however, differ principally in their strongly developed post-ocular lobes, the inferiorly approximate eyes, the toothed femora, and the appendiculate or toothed, divergent tarsal claws.

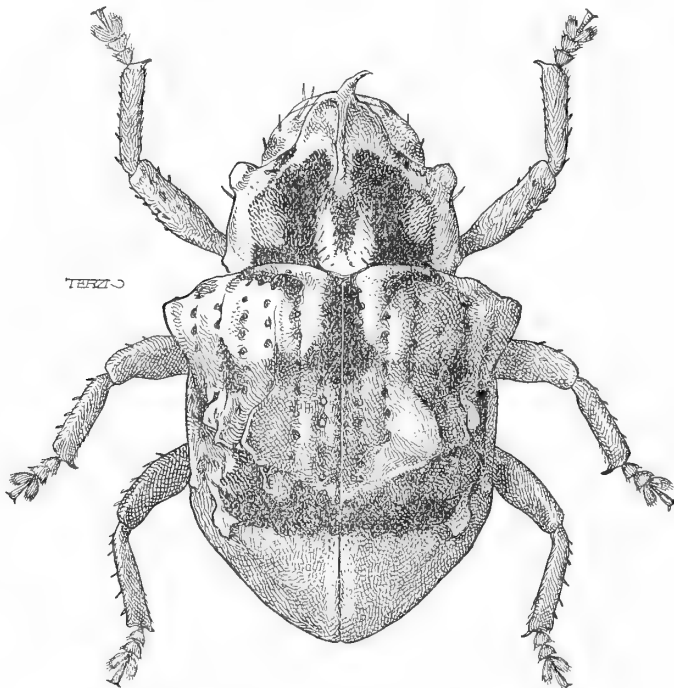
I have seen other undescribed species from the Marquesas Is. and Fiji.

#### 17. *Cranopoeus turritus*, sp. n. (Text-figs. 8, 9).

♂. Integument piceous brown, rostrum and antennae red-brown, and legs testaceous brown; rostrum, head and pronotum covered with a brown to fulvous waxy secretion, which is usually paler on the head and which is developed into a high vertical prominence in the middle of the pronotum; elytra with a broad band of fulvous secretion across the base and over the whole of the declivity, but the basal band sometimes interrupted on the suture, the median area being dark brown with variable patches of fulvous secretion, and with a

large erect waxy prominence on the disk of each elytron ; legs with dense, pale, fulvous secretion.

*Head* smooth and impunctate, with a distinct median fovea, but the whole surface hidden by secretion ; two long, erect setae adjoining each eye. *Rostrum* elongate, cylindrical in the basal half and dorso-ventrally compressed towards the apex, with close, rather rugose, longitudinally confluent punctures, a distinct low median carina in the basal half, and a shallow elongate median fovea between



TEXT-FIG. 8.—*Cranopoeus turritus*, sp. n., ♂.

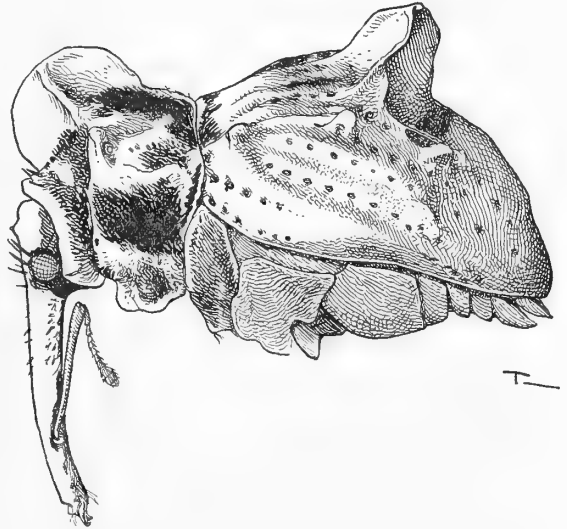
the antennae ; the whole surface behind the antennae normally hidden by secretion and with scattered, short, erect, pale setae. *Antennae* with the scape gradually clavate ; funicle with joint 1 as long as 2+3, 2 longer than 3, and 3 than 4, all being longer than broad, 5-7 as long as broad and moniliform. *Prothorax* transverse (11 : 8), widest at the base, gradually narrowing to beyond the middle, and there abruptly and very deeply constricted, the constriction being continued across the dorsum but interrupted in the middle by a carina that bears the anterior flange of the discal waxy process ; the base deeply bisinuate, the apex arcuate dorsally and somewhat oblique laterally ; dorsum



strongly convex longitudinally, the apex being well below the level of the base, shiny and impunctate when denuded, clothed with recumbent setiform scales that are pale in the middle and at the sides and dark in between; normally these scales are hidden by secretion, and in the middle of the disk arises a high sub-pyramidal wax process having four flanges, of which the longitudinal are longer than the transverse, and on each side (just behind the constriction) a small sub-conical wax process; a row of 8 stout erect setae across the apical margin and a few others about the middle of the disk. *Elytra* only a little longer than broad, jointly trisinuate at the base, with the shoulders obtusely prominent laterally, parallel-sided from behind the shoulders to beyond the middle, and then rapidly narrowed to the apices, which are jointly and broadly rounded; the dorsal outline almost flat from the base only to the middle and then sloping very steeply to the apex; the striae deep and strongly punctate, but normally concealed by secretion, and intervals 3 and 5 a little higher than the others; on each elytron at the middle an erect waxy process with four flanges, like that on the pronotum, the longitudinal flanges being on interval 3, the inner lateral one reaching only to interval 2, and the outer one to 5; two small wax tubercles on interval 4, one before and the other behind the middle, but the former usually lacking; a few scattered, short, erect, white setae, especially towards the apex. *Legs* normally covered with dense secretion and with numerous stout, erect, sharp, white setae; tibiae sub-compressed, stout and straight; tarsi rather short and broad, joint 2 strongly transverse.

Length: 2.1–3 mm.; breadth, 1.2–2.1 mm.

Upolu: Malololelei, 2,000 ft., 7 ♂♂, 22.xi.1924.



TEXT-FIG. 9.—*Cranopoeus turritus*, lateral view.

*Spanochelus*, gen. nov.

Closely allied to the preceding genus, *Cranopoeus*, and differing principally in the following particulars :—

Antennae inserted at one-third from the apex of the rostrum in both sexes, the scape shorter than the funicle and club together. Front coxae extremely narrowly separated ; mesosternal process very short and vertical, the space between the median coxae being as broad as a coxa (half the width in *Cranopoeus*) ; metasternum between the coxae as long as the median coxa. Tarsi with only a single claw ; joint 4 very short and not exceeding the apical setae on joint 3.

Genotype, *Spanochelus planirostris*, sp. n.

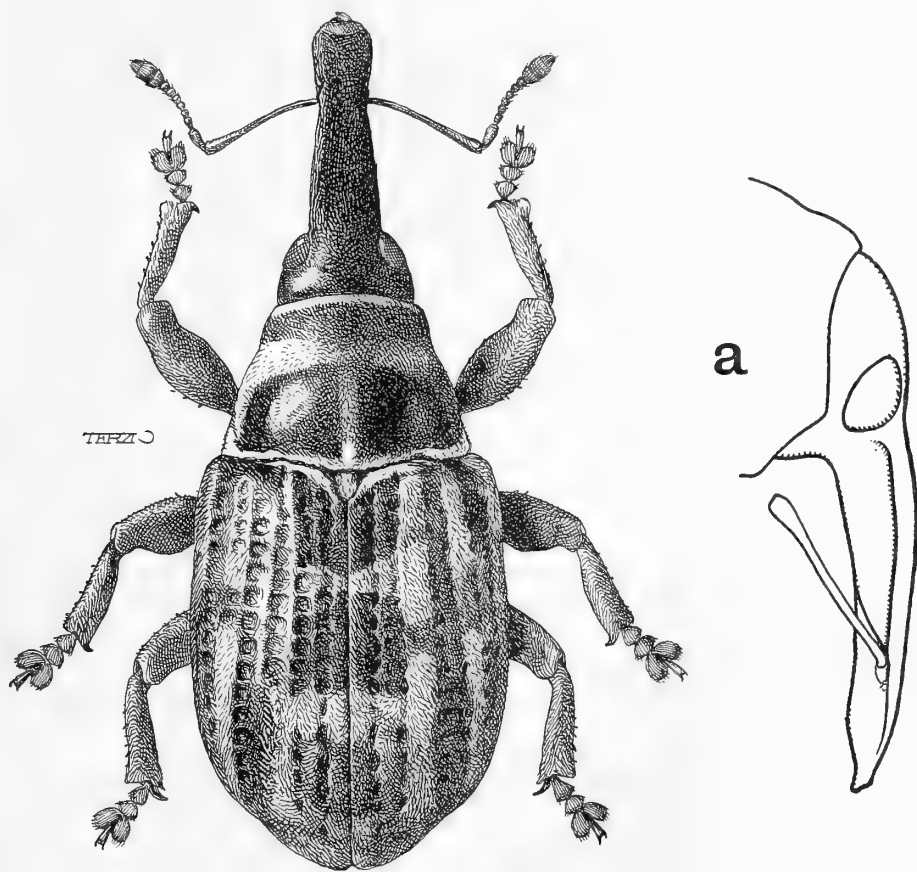
The genotype also presents remarkable peculiarities in the form of the rostrum and of the anal ventrite in the female.

18. *Spanochelus planirostris*, sp. n. (Text-fig. 10).

♂♀. Derm red-brown ; prothorax with the following markings formed of greyish or yellowish setiform scaling, more or less covered with a waxy secretion ; a median stripe from the base (where it extends somewhat laterally) to the sub-apical constriction, a broad lateral stripe, a transverse band in the sub-apical constriction, a dense fringe along the whole apical margin and continued along the lower and basal margins of the prosternum (all liable to be more or less abraded) ; elytra with indefinite macular stripes of small pale scales on intervals 3, 5, 7 and the apical half of 1, and with a short transverse band across the summit of the declivity extending to interval 3 on each side ; all the margins of the meso- and metasternum with fringes of ceriferous setae.

*Head* with very fine sparse punctures and setiform scales, the scales becoming denser and coarser anteriorly ; frons as wide as the base of the rostrum, flattened or shallowly impressed, and with a small median fovea. *Rostrum* of ♀ a little longer than a front femur, very broad and entirely flat dorsally, shallowly constricted at the base, widest at about one-fifth, then gradually narrowing to near the apex and there roundly dilated ; the dorsum strigulose, with dense, longitudinally confluent punctures, the lateral margins widely overhanging the recessed and deeply impressed lateral areas ; rostrum of ♂ normally convex, not constricted at the base, gently narrowing to beyond the middle and then gradually widening

to the apex, the dorsum with close confluent punctures but not strigulose; the lateral areas vertical (not impressed) and strigulose. *Antennae* with the scape slender and clavate; funicle with joint 1 as long as 2+3, 3-5 sub-equal and as long as or slightly longer than broad, 6 and 7 slightly transverse. *Prothorax* trapezoidal, somewhat broader than long, widest at the base, which is distinctly bisinuate, strongly narrowed to the apex; which is gently arcuate, only slightly



TEXT-FIG. 10.—*Spanochelus planirostris*, sp. n., ♂; a, lateral view of head.

rounded at the sides, and with a shallow sub-apical constriction, which is continued broadly across the dorsum; dorsum gently convex longitudinally, highest at the middle, with the dark areas on each side of the pale median stripe almost bare and shiny, elsewhere with rather sparse brown setiform scaling. *Scutellum* very small, elongate, bare. *Elytra* sub-quadrate (9 : 8), gently trisinuate at the base, not very much broader at the roundly prominent shoulders than the base

of the prothorax, subparallel-sided to beyond the middle, broadly rounded behind (viewed directly from above), the posterior declivity being almost perpendicular and very deep, and the dorsum flat longitudinally from the base to three-fourths; the striae strongly and closely punctate; the intervals not or but little broader than the striae, gently convex, the alternate ones being slightly more raised in the posterior half, with the scales minute and ovate, and without perceptible setae. *Legs* comparatively short and stout, red-brown, with sparse elongate scales; the femora apparently having normally a dorsal and ventral ceriferous fringe, which is often abraded; the tibiae in the apical half with a dense dorsal fringe, the setae in which become rapidly longer distally and are matted with secretion, so that superficially the tibiae appear to be dilated apically; the tarsi broad, joint 2 nearly twice as broad as long. *Venter* of ♀ with the lateral and apical margins of the anal ventrite carinately elevated and deeply bi-emarginate at the apex; anal ventrite of ♂ normal.

Length: 1.6–2.0 mm.; breadth, 1.0–1.1 mm.

Upolu: Malololelei, 2,000 ft., 2 ♂♂, 5 ♀♀, 22 and 30.xi.1924.

#### CRYPTORRHYNCHINAE.

##### 19. *Anaballus amplicollis*, Fairmaire.

*Rev. Zool.*, (2) i, pp. 36, 514, 1849.

Upolu: Apia, 1 ♀, 23.v.1924.

The species occurs also in Fiji, Tahiti (type locality), and New Caledonia.

##### 20. *Elytroteinus subtruncatus*, Fairmaire.

*Pteroporus subtruncatus*, Fairmaire, *Ann. Soc. Ent. France*, (6) i, p. 307, 1881.

*Elytroteinus subtruncatus*, Fairm., Marshall, *Bull. Ent. Res.*, xi, p. 276, pl. vii, fig. 8, 1920.

Upolu: Apia, 1 ♂, xii.1912, 1 ♂, 1 ♀, in rotten coconut palm, i.1913 (K. Friederichs); Puipaa, 1 ♀, in dead tree stump (Friederichs).

Originally described from Fiji, and recently found in Honolulu attacking the roots of ginger (*Hedygium coronarium*).

##### 21. *Acalles samoanus*, sp. n.

♂♀. Derm black, with dense dark brown scaling variegated with yellowish patches; pronotum with a broad longitudinal pale patch of varying length on

each side of the base opposite interval 5 on the elytra ; elytra with indefinite irregular variable pale patches.

*Head* with the coarse punctation concealed by brown scaling ; the forehead gently convex, as broad as the base of the rostrum, with a few sub-erect squami-form pale setae on each side ; the eyes flat. *Rostrum* gradually narrowing from the base to the antennae and then widening again to the apex, which is as broad as the base ; in ♂, with four rows of coarse sub-reticulate punctures on the basal portion, which become confused on the apical area ; in ♀, the apical half with much smaller separated punctures on the disk. *Antennae* red-brown ; joint 2 of the funicle a little longer than 1, 3 longer than broad, 4-6 about as long as broad, 7 transverse. *Prothorax* slightly broader than long (6:5), strongly rounded at the sides, widest behind the middle, shallowly constricted near the apex, and subtruncate at the base ; the dorsum gently convex longitudinally, sloping anteriorly, set throughout with coarse reticulate punctures (normally hidden by scaling) and with small shiny granules here and there on the intervals ; the punctures each with a short, erect, spatulate, brown seta. *Scutellum* invisible. *Elytra* broadly ovate, widest before the middle, feebly arcuate jointly at the base, with the basal angles projecting slightly beyond those of the prothorax, and broadly rounded at the apex ; the nine deep striae containing deep rounded punctures, the septa between which are almost or quite as wide as the intervals ; the latter not wider than the striae, and each with a row of rounded granules alternating with very short sub-erect spatulate setae, the granules on interval 1 extending only from the base to near the middle, those on the inflexed margins much larger and obtuse ; a granular callus at the apex of intervals 3 and 9. *Legs* black, with the tibiae and tarsi red-brown, sparsely set with recumbent spatulate pale setae ; the femora with coarse, shallow punctation ; the tibiae with a fine dorsal carina, and a very small tooth at the inner apical angle. *Venter* with the intercoxal process broadly arcuate ; ventrites 1 and 2 fused in the middle and on a higher level than the apical ones, set with coarse separated punctures containing short recumbent setae and without scaling ; 1 shorter than 2+3+4, 2 much longer than 3+4, the latter costiform, bare and impunctate.

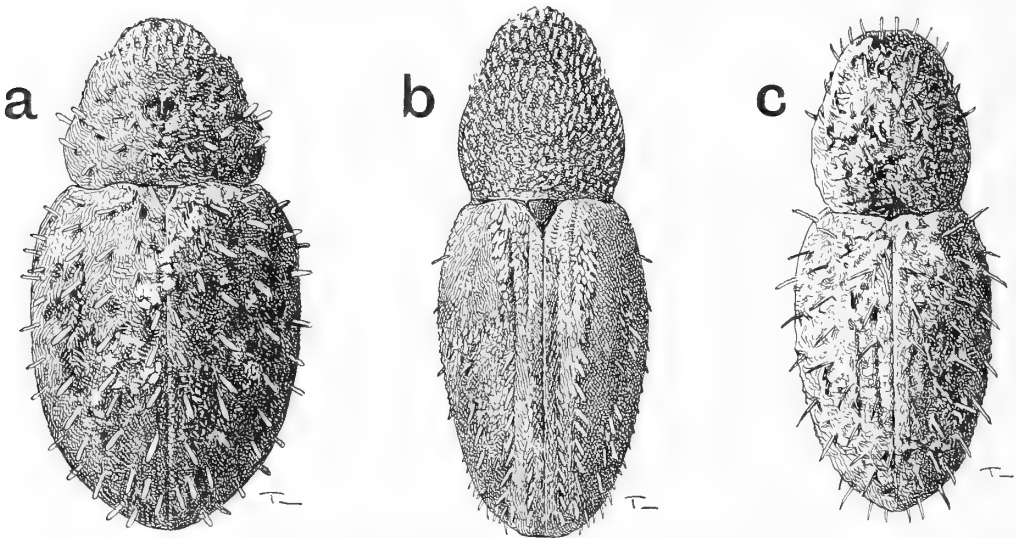
Length : 2·7-3·5 mm. ; breadth, 1·4-1·8 mm.

Upolu : Apia, 1 ♀, xi.1924 (type) ; Aleipata, 1 ♂, 1 ♀, iv.1924.

22. *Microcryptorrhynchus analis*, sp. n. (Text-fig. 11, c).

♂♀. Derm black; the apex of the rostrum, the antennae and tarsi red-brown, the anal ventrite yellow-brown; the upper surface closely covered with an amorphous earth-brown incrustation and apparently without true scales.

*Head* with dense incrustation and a few very short erect squamiform setae. *Rostrum* narrowly tricarinate, the median carina more distinct; the basal half encrusted and with some very short erect clavate setae, the bare apical half with four rows of confluent punctures. *Prothorax* longer than broad (11:9), moderately rounded at the sides, widest at the middle, shallowly constricted



TEXT-FIG. 11.—(a) *Microcryptorrhynchus glomus*, sp. n., ♀; (b) *M. subscutellatus*, sp. n., ♂; (c) *M. analis*, sp. n., ♂.

near the apex, the constriction broadly and shallowly continued across the dorsum; the postocular lobes prominent; the dorsum longitudinally convex and set with coarse sub-reticulate punctures (concealed), the interspaces being equally narrow on the pleurae; the short, erect, clavate setae rather sparse on the disk and forming a single projecting row along the apical margin. *Elytra* ovate, widest at about the middle, obtusely acuminate at the apex, and truncate at the base; the shallow striae with regular deep sub-quadrate punctures (concealed), which diminish behind and are largest in striae 5 and 6; the intervals narrower than the striae, the alternate ones bearing a widely spaced row of long, erect, compressed setae; the dorsal outline forming a very flat curve, the posterior

declivity steep. *Legs* encrusted and with rather sparse, long, erect setae. *Under-side*: the overhanging part of the mesosternal cavity short and with a broad U-shaped sinuation; ventrite 2 much longer than 3+4, the latter costiform and impunctate.

Length: 1.6–1.7 mm.; breadth, 0.7 mm.

Upolu: Malololelei, 2,000 ft., 6 ♂♂, 6 ♀♀, vi. and xi.1924.

Closely allied to *M. vitiensis*, Lea 1928, from Fiji, which differs principally in its much more convex elytra, much paler antennae and tarsi, and in the absence of the fine median carina on the rostrum.

### 23. *Microcryptorrhynchus subscutellatus*, sp. n. (Text-fig. 11, b).

♂♀. Derm black, rather thinly clothed with grey scales, which are more or less covered with a brownish incrustation, especially on the dorsum; a median stripe on the pronotum and the scutellar area on the elytra usually grey.

*Head* with dense scaling, which is brownish on the vertex and grey in front. *Rostrum* of ♂ rather densely squamose throughout, with a narrow median carina showing through, and on each side in the basal half a dense row of erect scales, otherwise all the scales lying transversely except close to the base; ♀ with the apical half devoid of scales, with a broader, median, smooth stripe and strongly punctate at the sides. *Prothorax* a little longer than broad, strongly rounded at the sides, widest at the middle, shallowly constricted near the apex, the constriction broadly, but very shallowly, continued across the dorsum; the post-ocular lobes prominent; the dorsum convex longitudinally behind the constriction, with close, sub-reticulate punctures (concealed) throughout, the interspaces becoming wider on the pleurae; each puncture covered by a rather narrow, recumbent scale, the interspaces showing through here and there like flattened, shiny granules; the short, erect, clavate setae more numerous in the middle of the disk and on the apical area. *Elytra* narrowly ovate, widest at one-third from the base, and rather broadly rounded behind; a deep, triangular cavity in the scutellar area, in which the apex of the steeply immersed scutellum can be seen, and a well-marked sinuation on the basal margin at the base of striae 5 and 6; the striae narrow and rather shallow, containing close, small punctures, but on the humeral area the punctures much larger and sub-reticulate (usually concealed); the intervals much broader than the striae, the alternate ones bearing a row of stout, erect, pale setae, which are short and closely set near



the base (especially on interval 3) and much longer and widely spaced behind; the scales, when visible, very small and fairly dense; the dorsal outline rising from the base to before the middle, then sloping regularly to the apex. *Legs* with rather dense, small scales and with erect setae, which are much longer on the dorsal edge of the femora. *Underside*: the overhanging part of the mesosternal cavity comparatively long and with a sub-rectangular sinuation; ventrite 2 about as long as 3+4, the latter flat and sparsely squamose.

Length: 1.8–2.0 mm.; breadth, 0.7–0.8 mm.

Upolu: Malololelei, 2 ♂♂, 2 ♀♀, vii.1924.

The scutellar cavity and the sinuation in the base of the elytra will distinguish this species from any of those that have been previously described.

#### 24. *Microcryptorrhynchus glomus*, sp. n. (Text-fig. 11, a).

♀♂. Derm black, covered with a dense, amorphous, earth-brown incrustation above and below, but with a band of true scaling along the basal margin of the pronotum, and set with short, stout, erect, compressed setae.

*Head* with rugose, confluent punctation (concealed), and very short, erect squamiform setae. *Rostrum* tricarinate and with four rows of erect, squamiform setae, the sulci being filled with scaling. *Prothorax* transverse, rounded at the sides, widest behind the middle, strongly constricted near the apex, the constriction continued deeply and broadly across the dorsum; the post-ocular lobes not very prominent; the dorsum longitudinally convex behind the constriction, set throughout with deep, sub-hexagonal, reticulated punctures (concealed); the setae stout, erect and clavate, shorter and denser along the apical margin and absent from the transverse furrow. *Elytra* sub-rotund, only a little longer than broad (9:8), jointly sinuate at the base, widest at the middle, and broadly rounded behind; the punctures (concealed) large and sub-quadrate, the intervals between the rows very narrow, and but little wider than the septa between the punctures; the dorsal outline gently convex, highest at about the middle, the posterior declivity steep and almost perpendicular near the apex; the setae in regular rows along the alternate intervals. *Legs* with true scaling, the incrustation being confined to the dorsal edge of the femora, the setae stout and erect. *Underside*: the overhanging part of the mesosternal cavity short and with a U-shaped emargination; ventrite 2 much longer than 3+4, the latter costiform and bare.

Length: 1.7–2.0 mm.; breadth, 1.0–1.2 mm.

Upolu : Malololelei, 3 ♀♀, vi.-vii.1924 (type).

Tutuila : Pago Pago, 2 ♀♀, ix.1923 (Swezey and Wilder), 1 ♂, 18.ix.1924 (Bryan).

*Phanerostethus*, gen. nov.

*Head* convex, not entirely concealed by the pronotum, with the forehead narrower than the base of the rostrum. *Rostrum* much compressed dorso-ventrally, with the antennae inserted at or behind the middle. *Antennae* with the scape much shorter than the funicle, gradually clavate; the funicle with the two basal joints elongate; the club ovate, 4-jointed, the first joint as long as the rest. *Prothorax* pulvinate, rather strongly compressed laterally at the base, and with feeble, post-ocular lobes. *Scutellum* small, but distinct. *Elytra* sub-truncate at the base, and there not wider than the base of the prothorax, without humeral calli, and with the tenth stria abbreviated. *Wings* not functional. *Legs* comparatively slender and elongate; the femora only moderately clavate and edentate, the hind pair reaching the apex of the elytra; the tibiae sub-cylindrical, quite straight, with an almost longitudinal uncus and no tooth at the inner apical angle; the tarsi with joint 2 not transverse, the claws stout and divaricate. *Sternum* with the pectoral furrow squamose (except between the front coxae) and the mesosternal cavity quite open; the metasternum between the mid and hind coxae half the length of a coxa, the metepisternal suture invisible. *Venter* with the intercoxal process broadly arcuate, as wide as a coxa; ventrite 1 about as long as 2+3+4, separated from 2 by a distinct, curved suture, 2 as long as 3+4.

Genotype, *Phanerostethus dilophus*, sp. n.

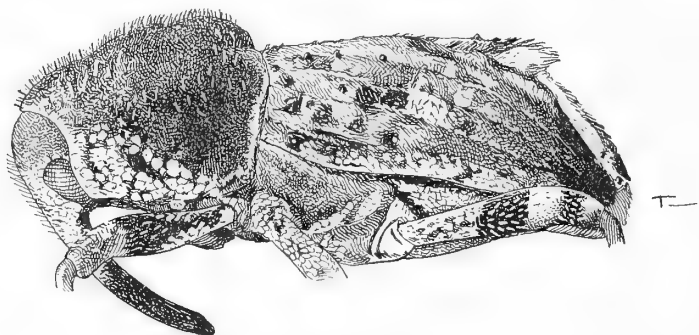
Most nearly allied to the Australian *Pteroporopterus*, Lea 1912, which, however, differs in the following characters: the antennae are inserted beyond the middle of the rostrum; the mesosternal receptacle is bare and raised above the level of the metasternum, with its posterior margin overhanging; stria 10 on the elytra is complete; the intercoxal process of the venter is ogival and much narrower than a coxa; the femora bear a small tooth\*; and the tarsal claws are not divaricate.

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\* Mr. Lea describes the femora as edentate, but I have before me a specimen of the genotype, *P. lacunosus*, Lea, named by the author, in which they are certainly dentate, though the tooth is small and almost hidden by dense scaling.

25. *Phanerostethus dilophus*, sp. n. (Text-fig. 12).

♂♀. Derm black, with dense brown scaling, which appears to be partly amorphous, variegated with paler and darker markings; the pronotum with two admedian whitish spots on the disk, each sometimes surrounded by an indefinite, blackish ring, and an ill-defined, yellowish or tawny patch in the middle of the base; the elytra with an elongate, tawny patch (sometimes indistinct) starting at the two juxta-sutural tufts at the top of the declivity and widening to the apex, being bounded externally by stria 3; the disk of the elytra with very indefinite and variable, darker mottling, and a rounded whitish spot at the middle on interval 8 and a contiguous one just behind it on interval 7; the underside with fairly dense, pale grey scaling, but denser, pale buff scaling on the metasternum and mesosternal receptacle.



TEXT-FIG. 12.—*Phanerostethus dilophus*, sp. n., ♂, lateral view.

*Head* with dense brown scaling and short, sub-recumbent squamiform setae. *Rostrum* of ♂ with dense grey or yellowish scaling in the basal half, with an elongate, darker, median patch and with traces of three fine, sinuous, median carinae, the apical half with fine, dense, elongate, sub-confluent punctures; ♀ with a smaller squamose area at the base and no trace of the carinae, the punctures on the distal part extremely fine, separated and not elongate. *Antennae* with joint 1 of the funicle longer and stouter than 2, as long as 2+3, 3-6 as long as or a little longer than broad, 7 a little wider and transverse. *Prothorax* as long as broad, strongly rounded at the sides, widest at about the middle, the sides being almost straight for some distance from the base, more rapidly narrowed in front, and shallowly constricted near the apex; the base feebly bisinuate and the angles sub-rectangular; the dorsum strongly convex longitudinally, rising very steeply from the base

and highest at about one-third, the apical area being somewhat depressed ; the sculpture consisting of fairly large, separated, oval punctures, but entirely hidden by the matted scaling ; the numerous setae short, stiff, and erect, pointed in ♂ and much shorter and clavate in ♀. *Scutellum* punctiform, with dense, yellowish scales. *Elytra* elongate-ovate in ♂, widest at about one-fourth from the base, broadly rounded or even sub-truncate at the apex, without any sub-apical callus, the dorsal outline almost flat from the base to beyond the middle, the declivity having a slope of about  $45^{\circ}$  ; in ♀ shorter and broader, widest at the middle, the dorsal outline convex, and the declivity steeper ; the striae somewhat irregular and containing very large, closely set punctures (partly hidden by scaling) ; the intervals not broader than the punctures, 3, 5 and 7 being more raised than the others and bearing small, distant, shiny granules (especially in ♂), 3 being widened at the top of the declivity and with an elevation bearing a tuft of erect, yellowish scales ; all the intervals with a row of small, stout, sub-erect, pale setae, which are pointed in ♂ and more scale-like in ♀. *Legs* with dense scaling and short, stout, sub-recumbent, white setae ; the femora grey at the base, dark brown in the middle, and paler brown at the apex ; the tibiae dark brown, with the apical third and a band near the base grey or pale brown.

Length : ♂ 3.5, ♀ 2.6–3.25 mm. ; breadth, ♂ 1.4, ♀ 1.2–1.4 mm.

Upolu : Malololelei, 2,000 ft., 2 ♂♂, 3 ♀♀, iv, vi, xi, xii.1924.

## 26. *Deretiosus scutiger*, sp. n.

♀. Derm testaceous brown, hidden by dense scaling ; head and pronotum greyish buff, base of rostrum and sides of prothorax brown ; scutellum white ; elytra pale greyish brown, with the extreme base of interval 2 blackish brown and a curved, dark brown stripe on the basal fifth of interval 3 ; a rather indefinite, brown, common shield-shaped patch about the middle, with its apex posteriorly on the suture at about two-thirds of the length, its base at about one-third, sinuate and extending on each side to stria 4 ; the declivity with a very indefinite, broad, transverse, darker band, and the whole disk with numerous scattered, small, round pustules formed of erect, light or dark brown scales ; the lower surface greyish white in the middle, turning to light brown at the sides and on the last three ventrites.

*Head* with the dense scales erect and curled, producing a sponge-like appear-

ance, and with numerous short, stout, erect setae, which are only slightly longer than the scales; the frons broadly and shallowly impressed. *Rostrum* rather slender, gradually narrowed from the base to the antennae, which are inserted at the middle, and subparallel-sided thence to the apex; the basal half densely squamose, and with sparse, short, erect setae; the apical half bare and with close separated punctures. *Antennae* testaceous brown; the funicle with joint 2 a little longer than 1. *Prothorax* transverse (13:11), almost parallel-sided from the base to the middle, then roundly narrowing, and broadly constricted and sub-tubulate at the apex; the post-ocular lobes rather feeble; the dorsum higher on the basal than on the apical half, with a group of very short, erect setae on each side of the apex and a transverse row of four low fascicles about the middle, the median pair being less prominent; the general scaling flat, except in the fascicles, where it is erect and sponge-like. *Elytra* oblong-ovate, almost truncate at the base, subparallel-sided from the roundly rectangular shoulders to beyond the middle, and obtusely acuminate at the apex; the striae distinct and more or less sinuous, the punctures being almost entirely concealed by the scaling; interval 3 with a broad, elongate elevation near the base, and a lower, narrower one on the base of 5; all the intervals with small, round pustules, formed of erect scales round a short, thick seta, those on intervals 1, 3, 5, 7 slightly larger than the others. *Legs* with fawn-coloured scaling and scattered, short, stout, sub-erect, pale setae; femora with two indefinite, darker bands, and the posterior pairs with their posterior and lower surfaces whitish, the femoral tooth small but sharp; tibiae somewhat darker on the basal half, the front pair almost straight on the lower edge and shallowly sinuate on the dorsal edge.

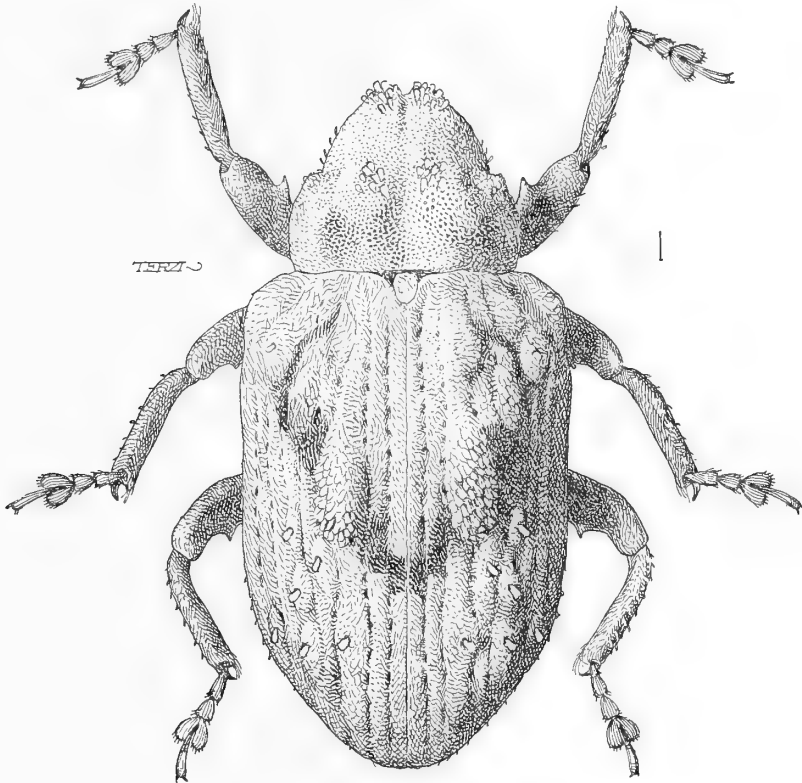
Length: 4.8 mm.; breadth, 2.3 mm.

Upolu: Malololelei, 1 ♀, 25.iv.1924.

Apparently the nearest ally of this species is, judging from the description only, *D. lectus*, Lea 1928, from Fiji, which is, however, a larger insect (6 mm.); moreover, the prothorax has dark setae near the apex, and the median fascicles are blackish; the elytra lack the shield-shaped patch, there is an additional smaller fascicle on interval 3, and the even-numbered intervals have no pustules except on the declivity.

27. *Deretiosus gibber*, sp. n. (Text-fig. 13).

♀. Derm piceous, hidden by dense brown scaling; elytra with a common, blackish-brown, V-shaped marking, having its apex on the suture at the top of the declivity and its arms extending forwards to one-fourth from the base on interval 5, and with a very indefinite, broad, transverse, paler band across the



TEXT-FIG. 13.—*Deretiosus gibber*, sp. n., ♀.

declivity; the lower surface with grey scaling, turning to brownish laterally on the sternum.

*Head* with recumbent, concave scales and with extremely short, sparse, erect, scale-like setae; the frons somewhat flattened but not impressed. *Rostrum* rather slender, somewhat narrowed from the base to the antennae, which are inserted beyond the middle, and thence gradually widening to the apex; squamose and with rugose, confluent punctation on the basal third, elsewhere rather sparsely punctate, the punctures mostly forming two irregular dorsal rows. *Antennae*

testaceous brown ; the funicle with joint 2 slightly longer than 1. *Prothorax* transverse (11 : 8), widest at the base, gradually narrowing with a curve anteriorly, and with the apical portion broadly, but not very abruptly, constricted beyond the middle ; the dorsum rather higher in the basal than in the apical half, with a large cluster of short, erect, brown setae on each side at the apex and a transverse row of four equal brown fascicles at about the middle ; the scales concave and producing a honeycomb appearance. *Scutellum* rounded, with brown scaling. *Elytra* oblong-ovate, very feebly trisinuate at the base, parallel-sided from the roundly rectangular shoulders to two-thirds, and broadly rounded at the apex ; the striae distinct and regular laterally, but the first 4 indistinct and sinuous, and the punctures in all of them concealed by the scaling ; interval 3 with a medium-sized, rounded fascicle near the base and a very large, elongate one ending at a little beyond the middle, between these a small fascicle on interval 5, a transverse row of larger pustules across the declivity on intervals 3, 5, 7, and several smaller ones along 5 and 7, there being none on the alternate intervals. *Legs* with uniform brown scaling and sparse, short, erect, pale setae ; the femora with a small sharp tooth ; the front tibiae straight on the upper and lower edges.

Length : 3.6 mm. ; breadth, 1.8 mm.

Upolu : Tuaefu, 1 ♀, 16.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

Distinguished by the linear arrangement of the punctures on the rostrum, the V-shaped dark mark on the elytra, and the very large median fasciculate elevation on interval 3.

## 28. *Deretiosus wilderi*, sp. n.

♂. Derm red-brown, hidden above and below with dense isabelline grey scaling, except on the apical two-fifths of the rostrum, which is bare ; pronotum with the setae in the two apical and the two median fascicles blackish, and a very irregular, macular, median stripe of brown scales ; elytra with a short, basal, brown stripe on interval 3, a small blackish-brown spot just before the middle on intervals 8 and 9, and some brown scales round the sub-median fascicle on interval 3 (*type*). In a second specimen (damaged) the whole disk of the pronotum is dark brown, and the general colour of the elytra is darker than in the type, there being a common, pale, V-shaped marking behind the middle which is sharply defined on its anterior edge and indefinite behind.



*Head* with dense hollowed scales and scattered, minute, dark setae that are but little higher than the scales; frons shallowly impressed transversely, with a distinct, small, median puncture and a group of longer, erect setae on each side next the eye. *Rostrum* almost parallel-sided, with the antennae inserted at one-third from the apex; the basal area quite even, and with dense, concave scaling and very short, erect setae; the bare apical area with very dense, small, sub-confluent punctures. *Antennae* testaceous brown; scape with a distinct apical fringe of setae; funicle with joint 2 definitely longer than 1, joints 4-7 stout, bead-like and slightly broader than long. *Prothorax* transverse (5:4), parallel-sided from the base to a little beyond the middle, then rapidly narrowing anteriorly (the sides forming an obtuse angle), and with a broad, shallow, apical constriction; the post-ocular lobes strongly developed; the dorsum higher in the basal half than in front, with a definite fascicle of peg-like setae on each side of the apex and a curved, transverse row of four fascicles near the middle, the inner pair being behind the outer and much less prominent, and the outer pair not situated at the lateral angulations but inside them; the scales comparatively very large (4 or 5 times the size of those on the elytra), recumbent and deeply concave, those on the post-ocular lobes being larger still and quite flat. *Elytra* oblong-ovate, sub-truncate at the base, slightly widening behind the roundly rectangular shoulders and broadly rounded at the apex; the striae comparatively straight, the punctures showing distinctly through the scaling, but very small, each containing a small scale-like seta; interval 3 with a small fascicle at one-fifth from the base, a longer but not very large one near the middle, and a row of 4 or 5 small pustules behind it; interval 5 with a pustule at one-sixth from the base, one or two before the middle, two behind it, and an elongate fascicle on the posterior callus; interval 7 with a few scattered, indefinite pustules, and a row of minute ones on the apical half of interval 1; the even-numbered intervals without pustules. *Legs* with sandy or fawn scaling and two indefinite, variable dark patches on each of the femora and tibiae; the femoral tooth rather large and sharp; the tibiae strongly arcuate dorsally in the basal half.

Length: 6.0-6.5 mm.; breadth, 3.1-3.4 mm.

Tutuila: Pago Pago, 2 ♂♂, under rotten bark, 21.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

This species differs from the two preceding ones *inter alia* in its larger size, densely punctate rostrum, the curved row of fascicles on the pronotum and

the situation of the outer ones *inside* the lateral angulation, the very large scales on the pronotum and especially those on the more prominent post-ocular lobes, the arcuate tibiae, etc.

From the description, it appears to be nearly related to *D. lectus*, Lea 1928, from Fiji, which, however, has the prothorax sub-conical; on interval 3 the basal fascicle is larger than the median one; and there are pustules posteriorly on the even-numbered intervals.

### *Deretiodes*, gen. nov.

Closely allied to *Deretiosus*, Pasc. 1871, and especially in the complete absence of the usual mesosternal receptacle, the sternal furrow terminating instead in a slightly over-arched cavity in the metasternum; but differing from that genus in the following characters:—

Funicle of the antennae with 6 joints only, the 7th being entirely fused with the club; femora without any tooth, the tibiae not sinuate or carinate on the lower edge; mesosternum without any tubercle on its anterior edge in front of the median coxae.

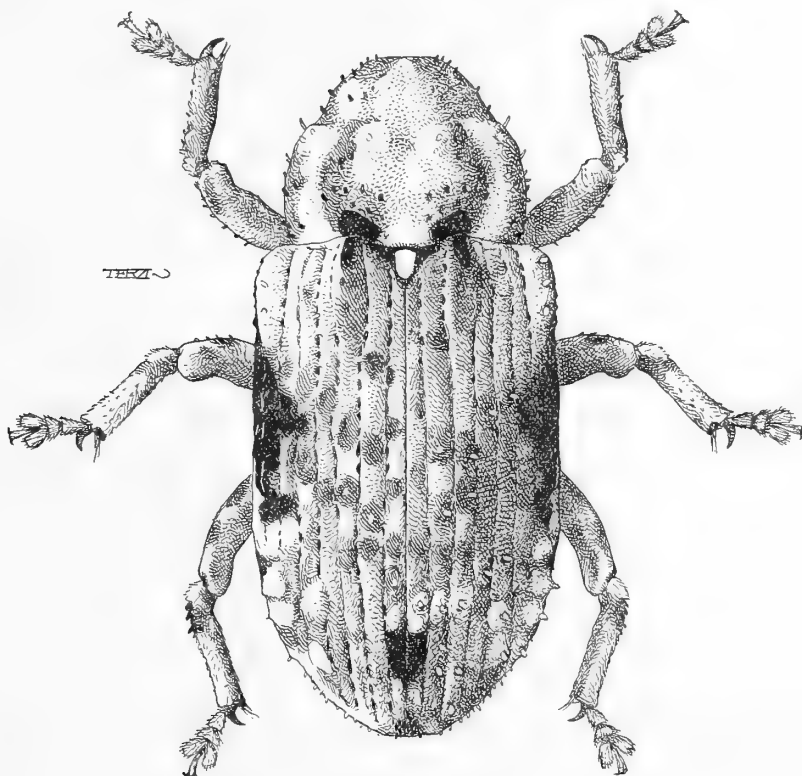
Genotype, *Deretiodes swezeyi*, sp. n.

### 29. *Deretiodes swezeyi*, sp. n. (Text-fig. 14).

♀. Derm red-brown, everywhere concealed by dense scaling; head brown, with a narrow median stripe, a small spot on each side of the vertex, a variable patch on the forehead, and a narrow line above each eye, greyish white; prothorax greyish or yellowish white, with a small blackish patch on each side of the middle of the base, an indefinite, broad, curved, brownish stripe from each patch to beyond the middle, and a variable, ill-defined, pale brownish area on each side at the apex; scutellum white; elytra dorsally with greyish-brown scaling, having a distinct opalescent reflection, and with the following markings: a supra-humeral greyish white patch between striae 3 and 7 and from the base to one-fifth, but indefinite posteriorly; an infra-humeral blackish brown patch from the base nearly to the middle (and there broadly truncate), reaching the lateral margin and extending broadly inwards behind the shoulder as far as stria 5; an oblong patch on the suture in the middle of the declivity, a small spot at the apex, and some variable and irregular spots behind the middle on

intervals 7-9, blackish ; an elevated brown stripe on interval 3 from the base to one-fifth, and numerous rounded, raised, brown spots at and behind the middle on intervals 1-5 ; a sub-quadrate whitish patch above and adjoining the sutural black patch on the declivity, and irregular whitish markings and raised spots behind the middle on intervals 3-9 ; the lower surface uniformly greyish white.

*Head* with fairly dense, erect, curved scales and very short, erect, scale-like setae. *Rostrum* only slightly curved, distinctly narrowed from the base to the



TEXT-FIG. 14.—*Deretiodes swezeyi*, sp. n., ♀.

middle, and thence slightly widening to the apex, with the antennae inserted at the middle ; the apical half bare, and with fairly dense, small, separated punctures, the basal half densely squamose. *Antennae* testaceous brown ; funicle with joint 1 a little longer and much wider than 2, 3-5 equal and as long as broad, 6 a little longer and broader. *Prothorax* a little broader than long (6 : 5), gently rounded at the sides, widest at about the middle, deeply constricted and sub-tubulate at the apex, the apical margin strongly arcuate and the base shallowly

bisinate; the dorsum feebly convex longitudinally, densely squamose, the apical half of the scales being erect and concave, and just behind the constriction a transverse row of four low elevations formed of groups of very stout, short, erect, scale-like setae and erect scales; similar isolated erect setae scattered over the dorsum, being most numerous near the apex. *Scutellum* sub-quadrate, with dense, overlapping, white scales. *Elytra* comparatively elongate, sub-oblong, almost parallel-sided from the shoulders to two-thirds, and broadly rounded at the apex; the more or less sinuous striae appearing narrow owing to the scaling and with the punctures partly concealed; interval 3 with a broad elevation from the base to one-fifth, immediately behind which is a very shallow, broad, transverse impression extending to stria 4 on each side; all the intervals with numerous, irregular and variable pustules, formed of erect scales surrounding a very stout, short, erect seta, the remaining scales being flat, overlapping and fluted; interval 4 much narrower near the base than any of the others. *Legs* with dense, greyish white scaling and scattered, stout, short, erect setae; the femora with an indefinite dorsal brown patch at the middle and another beyond the middle, the former much reduced on the front pair, and much larger and darker on the hind pair; the tibiae greyish white with a brown basal patch.

Length: 3.9–4.2 mm.; breadth, 1.7–1.8 mm.

Tutuila: Leone Road, 3 ♀♀, 7.ix.1923, under rotten bark (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

### Teleodactylus, gen. nov.

Another member of the *Deretiosus* group, agreeing with that genus and with *Deretiodes*, gen. n., in the structure of the sternal furrow, but differing from them both in the very unusual form of the third tarsal joint, which, instead of being deeply bilobate for the reception of the claw-joint, is broadly truncate on its distal margin, the claw-joint being attached in a dorsal fovea, as in the CALANDRINAE.

Differing also from *Deretiosus* in having only 6 funicular joints to the antennae and in the absence of the small tubercles in front of the median coxae; and from *Deretiodes* in having a small sharp tooth on all the femora.

Genotype, *Teleodactylus roscidus*, sp. n.

30. *Teleodactylus roscidus*, sp. n.

♀. Derm piceous, hidden by dense scaling; head fulvous, with two darker patches in the middle, the base of the rostrum grey; pronotum fulvous brown, becoming paler laterally and with a sub-quadrate whitish patch in the basal angles; elytra fulvous brown, with an irregular mottling of dark brown and numerous small whitish spots on the basal half and at the sides, a narrow macular whitish line across the top of the declivity, and two conspicuous whitish spots on each side of the apex; underside greyish white, with a brown patch at the side of the mesosternum and the metasternum, and a brown apical border to the anal ventrite.

*Head* with dense, recumbent, concave scales. *Rostrum* gently curved, almost parallel-sided, with the antennae inserted at the middle; the basal half more or less confluent punctate beneath the scaling, the apical half bare and with fine, separated punctures. *Antennae* testaceous, slender; joint 1 of the funicle slightly shorter and much broader than 2, 3 twice as long as broad, 4 and 5 sub-quadrate, 6 broader and trapezoidal. *Prothorax* almost parallel-sided in the basal half, then sinuately narrowed to the broadly arcuate apex, the base sub-truncate; the dorsum with dense, recumbent, concave scales, producing a regular honeycomb appearance, and the following stout, erect, peg-like setae: a group of 8 or 9 dark brown ones on each side of the apical area, a transverse row of four groups of 2 or 3 setae just behind the constriction, and isolated, pale setae along the lateral margin. *Elytra* parallel-sided from the shoulders to two-thirds and broadly rounded at the apex; the striae straight, with the close, shallow punctures entirely concealed by scaling; the intervals without pustules, but 3 with a short, low elevation near the base, 4 not noticeably narrowed at the base, the alternate intervals each with a row of short, broad, erect, scale-like setae; the scales densely overlapping and not fluted. *Legs* densely squamose and with short, stout, erect setae; the femora whitish at the base turning to pale fulvous at the apex, the hind pair with a broad median brown band, all bearing a small sharp tooth at about the middle; the tibiae varying from grey to fawn.

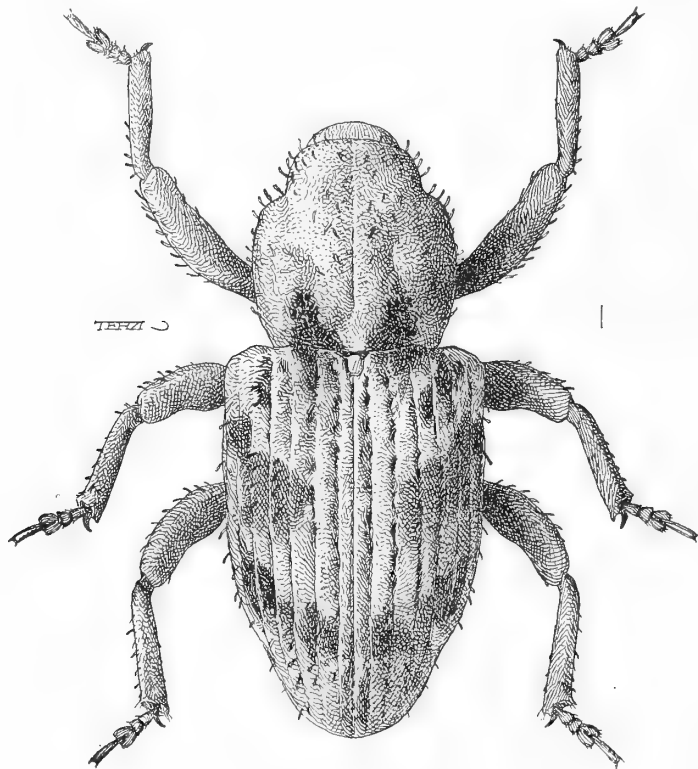
Length: 3.1–3.3 mm.; breadth, 1.4–1.5 mm.

Upolu: Malololelei, 2 ♀♀, xi.1924 (type), iv.1925.

31. *Chaetectetorus tutuilae*, sp. n. (Text-fig. 15).

♂♀. Derm black to red-brown, clothed with dense, light yellowish-brown scaling; the pronotum with an indefinite bilobate blackish patch in the middle of the base; the elytra mottled with indefinite and variable blackish markings; underside uniform yellowish brown.

*Head* with dense, slightly concave scaling concealing the sculpture; the forehead with a row of three or four erect spatulate setae along each eye margin.



TEXT-FIG. 15.—*Chaetectetorus tutuilae*, sp. n., ♂.

*Rostrum* closely punctate and densely squamose almost to the apex in ♂, with a feeble abbreviated median carina, the apical area finely and sparsely punctate; in ♀ the squamose area restricted to the basal half. *Antennae* with joint 1 of the funicle much larger than any of the others and as long as 2+3+4; 2 longer than 3, about as long as broad; 3-7 transverse and very slightly widening distally. *Prothorax* about as long as broad, strongly rounded at the sides, widest at the middle, regularly narrowing to the base, broadly and deeply

constricted near the apex, which is rounded, the base being somewhat broader and bisinuate; the dorsum rather uneven, with a shallow median furrow which does not quite reach the base and ends at some distance from the apex, and on each side of it about the middle a deep rounded impression; the close sub-confluent punctation everywhere concealed by the dense scaling, which forms an amorphous incrustation, the individual scales being scarcely discernible; the setae sparse, erect, and spatulate. *Scutellum* punctiform, yellow. *Elytra* oblong-ovate, short, 1.4 times as long as broad, with the shoulders moderately prominent and parallel-sided from there to only a little behind the middle, the sub-apical constriction being strong; the striae with large close punctures in the basal half which suddenly become much smaller behind; the intervals actually rather narrower than the striae, but appearing broader when the scaling is intact, and each with a row of erect spatulate setae, these being denser in the middle of interval 3, which is also somewhat elevated at the base. *Legs* with dense yellowish-brown scaling, the posterior pairs of femora with an indefinite darker median dorsal patch.

Length: 2.6–2.8; breadth, 1.2–1.3 mm.

Tutuila: Pago Pago, 9 specimens, 21–25.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

The smallest species of the genus known to me and coming nearest to *C. histrio*, Pasc., from Yule Island, which differs in its conspicuous black-and-white colouring, and, *inter alia*, in having the prothorax parallel-sided in the basal half, the elytra much more oblong and elongate (the length being 1.65 times the breadth), and the two basal joints of the funicle equal.

### 32. *Rhadinomerus atomosparsus*, Fairmaire.

*Cyamobolus atomosparsus*, Fairmaire, *Pet. Nouv. Ent.*, ii, p. 282, 1878; *Ann. Soc. Ent. France*, (6) i, p. 311, 1881.

Tutuila: Pago Pago, 1 ♀, 14.ix.1923 (J. Steffany). Originally recorded from Fiji.

### 33. *Orochlesis nigrofasciata*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 593, 1921.

Upolu: Malololelei, 1 ♀, 25.iv.1925.

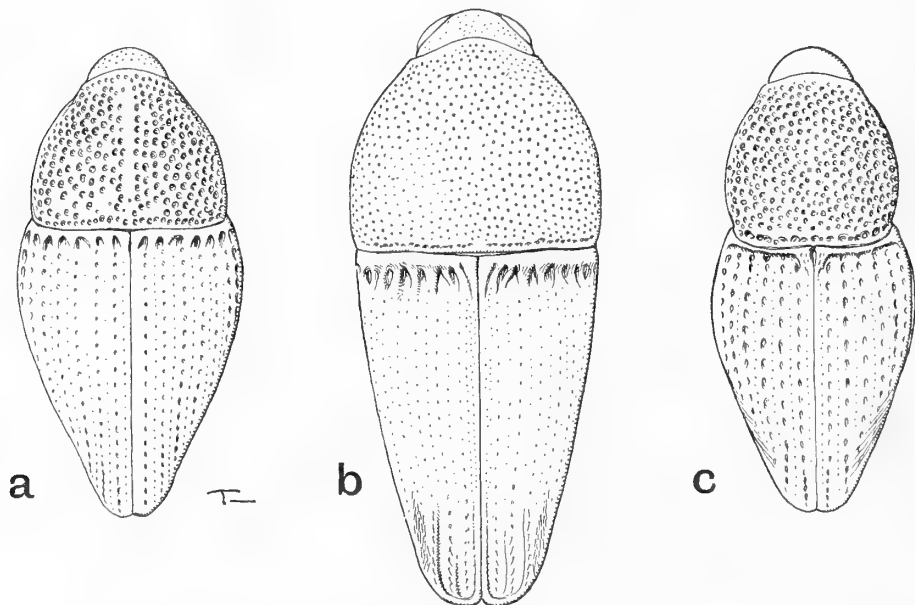
Savaii: Fagamalo, 1 ♀, xi.1925.



34. *Trigonopterus crinipes*, sp. n. (Text-figs. 16, *b* ; 17, *b*).

♂♀. Colour uniform shining bronze or blue-black, with a small elongate patch of a few narrow white scales near the apex of each elytron between striae 3 and 6.

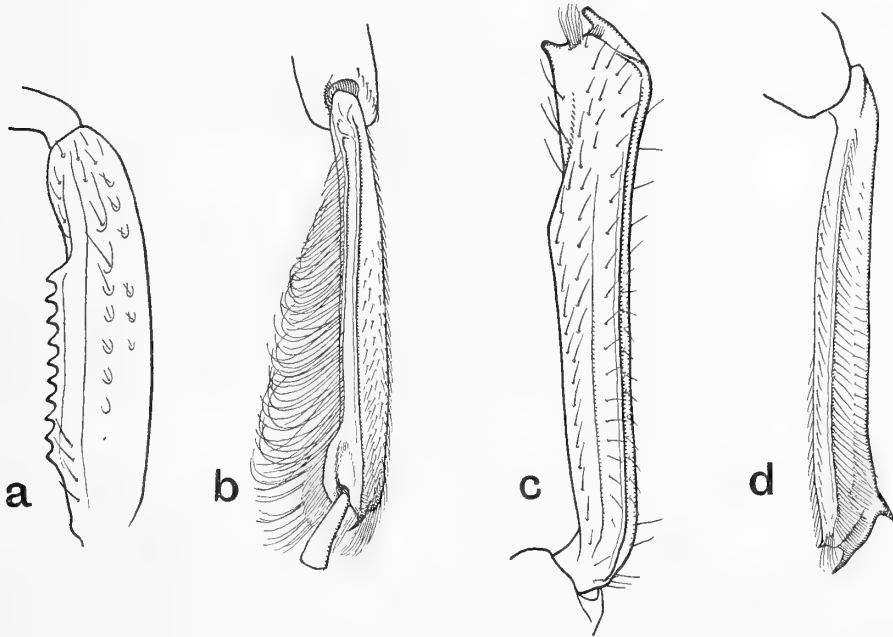
*Head* with rather fine separated punctures, which become much coarser and confluent on the forehead; the latter with short sub-erect white setae. *Rostrum* of ♂ with three rather variable dorsal carinae, of which the median one is rather higher and wider than the others in the middle, extending to one-fourth



TEXT-FIG. 16.—(a) *Trigonopterus bryani*, sp. n. ; (b) *T. crinipes*, sp. n. ; (c) *T. serratipes*, sp. n.

from the apex, the apical area being rugosely and shallowly punctate, and the punctate spaces between the carinae with the usual rows of obliquely raised setae; that of ♀ with the dorsal carinae only from the base to near the middle, the apical half smooth, with two very irregular rows of small punctures and with a deep sulcus on each side. *Prothorax* wider than the elytra in ♂, broadest not far from the base and narrowing in a curve to the apex without any constriction; in ♀, as wide as the elytra at the base and narrowing from there to the apex; the apical margin gently arcuate and half as wide as the base; the dorsal punctures fine and distant, being unusually even in both size and spacing, and with a transverse basal row of punctures, the margin being impressed only at the

sides; the dorsal punctures with very minute recumbent setae on the apical half; the pleurae with numerous large punctures, each containing a recumbent seta on the apical half, and with only a few much smaller ones in the basal impression. *Elytra* sub-triangular in ♂, widest at the base and rapidly narrowing to the broadly rounded apex, the sides being almost straight; in ♀, parallel-sided for a short distance from the base and then narrowed to the apex; the rows of punctures complete, but extremely small and distant, and not striate except at the apex, with a fovea at the base of each row; the punctures on the inflexed



TEXT-FIG. 17.—Legs of *Trigonopterus*: *a*, front femur of *T. serratipes*, sp. n.; *b*, hind tibia of *T. crinipes*, sp. n., ♂; *c*, front tibia of *T. caesipes*, sp. n., ♂; *d*, hind tibia of *T. submetallicus*, Mshl.

margins slightly larger than those on the disk, and row 9 with three or four large punctures at the base; the discal intervals each with a row of minute punctures of the same size as those in the typical rows but much more numerous, those on interval 1 being irregularly duplicated, and those on the lateral intervals more sparse or obsolete; the basal foveae and the coarser apical punctures with small recumbent pale setae, sometimes minute. *Legs* with the femora not toothed and the punctures coarser and denser on the apical half, usually with two irregular rows of punctures on the outer face and two on the dorsal edge extending almost to the base, the doubled fringe on the lower edge longer than

usual; the front tibiae with the inner apical angle produced into a short, sharp tooth, the middle pair broadly dilated inwardly at the apex (♂), and the hind pair with a fringe of long curled hairs on the inner face (♂) (text-fig. 17, *b*) and a short, sharp spine above the base of the uncus (often broken). *Venter* with a rather irregular transverse row of small punctures on ventrites 3 and 4; the anal ventrite without obvious setae, and in ♂ with two large shallow impressions in the apical half that are set with very fine shallow confluent punctures, in ♀ with coarse separated punctures in the apical half and no impressions.

Length: 3.0–3.6 mm.; breadth, 1.2–1.4 mm.

Upolu: Apia, 1 ♀, xii.1924; Mt. Vaea, 1,500 ft., Apia, 1 ♂, 20.xii.1924; Malololelei, 4 ♂♂, iii., vi., xi.1924, vii.1925 (type).

Savaii: Safune, 1 ♂, 13.v.1924 (Bryan); Salailua, 1 ♂, 22.v.1924 (Bryan).

### 35. *Trigonopterus submetallicus*, Marshall (Text-fig. 17, *d*).

*Proc. Hawaii. Ent. Soc.*, iv, p. 590, 1921.

Tutuila: Pago Pago, 3 ♂♂, 1 ♀, 16.iv.1924 (Bryan), 4 ♂♂, 14.xi.1925.

In the original description there is a misprint; on page 591, line 2, for "behind" read "beyond."

#### 35A. *Trigonopterus submetallicus mendax*, subsp. n.

The specimens of this species from Upolu appear to differ fairly constantly from those taken on Tutuila (typical form) in the following particulars:—

In *submetallicus* the minute hairs on the disk of the pronotum (a magnification of at least 40 is needed in order to see them) are closely recumbent, ventrites 3 and 4 bear a complete transverse row of punctures, and ventrite 5 has only sparse, short, recumbent hairs on each side.

In *submetallicus mendax* the hairs on the pronotum are quite erect, ventrites 3 and 4 have punctures at the sides only and not in the middle, and ventrite 5 bears more numerous longer, stouter, sub-erect setae on each side.

Upolu: Apia, 1 ♂, 1 ♀, xii.1924; Vailima, 1 ♂, 2 ♀♀, 13.ix.1925 (type); Malololelei, 1 ♂, 4 ♀♀, vi., xi.1924, iv., viii.1925.

Savaii: Safune, 1 ♀, 13.v.1924.

36. *Trigonopterus caesipes*, sp. n. (Text-fig. 17, c).

♂. Derm shiny black, the only markings being an elongate dense patch of narrow white scales near the apex of each elytron between striae 3 and 6.

*Head* with a few sparse punctures on the vertex, these becoming much more dense in front and rugosely confluent on the forehead, which bears minute, erect, pale hairs. *Rostrum* with three well-marked dorsal carinae extending almost to the apex, the adjoining spaces shagreened and bearing in the basal half four rows of backwardly directed stout sub-erect white setae, and on the apical half much finer, transversely placed hairs. *Prothorax* a little broader than long (11:9), parallel-sided from the base to the middle, then rapidly narrowed to the apex, but without any sub-apical constriction, and the apical margin strongly arcuate dorsally; the dorsal punctures fine and well separated, becoming finer and sparser basally (especially towards the sides) and larger and denser near the apex, but with a sparsely punctate area at the side of the dorsum near the apex and with a transverse row of close small punctures along the basal margin; all the dorsal punctures with a very short, erect, pale seta; the pleurae set with very large, but not confluent, punctures, which are less closely set in the basal depression. *Elytra* elongate-ovate, widening from the base to one-fourth and then rapidly narrowing to the broadly rounded apex, the sides being almost straight, and the basal margin truncate and slightly raised; the rows of punctures all complete, distinct and very shallowly striate, the punctures being larger than those in the middle of the disk of the pronotum, and those at the base of each row much larger than any of the others and elongate; striae 8 and 9 deeper than the others, the six basal punctures in stria 9 being all very large and contiguous, and stria 10 represented only by a few small punctures at the base and apex; the intervals each with a row of fine punctures, the punctures more or less duplicated on the basal half of intervals 1 and 3 and becoming much more sparse on the lateral intervals; in addition to the elongate white sub-apical patches there are only a few minute pale setae at the base of the intervals and along the apical margin. *Legs* with rather sparse, recumbent, pale setae; the femora not toothed, but the front pair obtusely angulate beyond the middle on the lower edge, and the hind pair with a row of white scales along the dorsal edge; the front tibiae with a small tooth at the inner apical angle, and with the inner face shallowly excised on the apical third, forming an obtuse angulation at one-third from the apex (probably a male character only) (text-fig. 17, c); the hind tibiae

with a small acute projection just above the base of the uncus. *Venter* with a row of punctures across ventrites 3 and 4.

Length : 3.6 mm. ; breadth, 1.5 mm.

Upolu : Malololelei, 2,000 ft., 1 ♂, vi.1924.

### 37. *Trigonopterus aeneoniveus*, Fairmaire.

*Le Naturaliste*, i, p. 19, 1879 ; *Ann. Soc. Ent. France*, (6) i, p. 315, 1881.

Upolu : Malololelei, 1 ♂, iv.1924 ; Vailima, 1 ♂, 1 ♀, 13.ix.1925.

Savaii : Safune, 8 ♂♂, 1 ♀, v.1924 (Bryan).

### 38. *Trigonopterus bicolor*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 592, 1921.

Tutuila : Pago Pago, 3 ♂♂, iv. 1924 (Bryan).

### 39. *Trigonopterus serratipes*, sp. n. (Text-figs. 16, c ; 17, a).

♀. Colour black, rather shiny ; the elytra red-brown, with the apex and the extreme basal margin blackish ; devoid of scaling, and the setae on the upper side minute and inconspicuous.

*Head* with remote punctures on the vertex, those on the forehead coarse and confluent. *Rostrum* with four rows of coarse punctures near the base, but scarcely carinate, anteriorly smooth, with two irregular rows of fine punctures and a sulcus on each side. *Prothorax* slightly broader than long (9 : 8), rounded at the sides, widest at the middle, gently narrowing to the base, more strongly narrowed in front, and shallowly constricted near the apex, with the apical margin dorsally truncate ; the dorsum with an abbreviated smooth median line, the punctures on each side of it being rather small, deep and separated, but becoming rapidly larger laterally, and very large and sub-reticulate on the prosternum, which is punctate throughout ; a scarcely impressed transverse row of small punctures across the base ; the setae in the dorsal punctures minute, but becoming rapidly longer laterally. *Elytra* ovate, strongly rounded laterally in the basal half, widest at about one-fourth from the base, rapidly narrowing behind and broadly rounded at the apex, the basal margin markedly elevated as a broad costa ; the rows of punctures deep and well-marked throughout and feebly striate on the dorsum, the basal punctures in each row not or but little

larger than the succeeding punctures; the dorsal intervals each with a row of minute closely set punctures which disappear posteriorly, except interval 1, which has an irregularly duplicated row from the base to the top of the declivity and a single row thence to the apex; the punctures bearing very minute recumbent setae which are only slightly longer towards the apex. *Legs* with the femora closely serrate on the lower edge (more marked on the front pair) (text-fig. 17, *a*), the punctures coarser and closer on the apical half, the hind pair with a single dorsal row of squamiform setae; the front tibiae with the inner apical angle rounded, the hind pair with a rudimentary projection above the base of the uncus. *Venter* with a complete row of punctures across ventrites 3 and 4.

Length: 2.8 mm.; breadth, 1.3 mm.

Savaii: Safune, 2,000–4,000 ft., in rain forest, 1 ♀, 3.v.1924 (Bryan).

*Type* in the Bishop Museum, Honolulu.

#### 40. *Trigonopterus bryani*, sp. n. (Text-fig. 16, *a*).

♂♀. Colour black, shiny, devoid of scaling or conspicuous setae.

*Head* with scattered strong punctures on the vertex, those on the forehead rugosely confluent. *Rostrum* of ♂ tricarinate almost to the apex, the median carina scarcely wider than the lateral ones but distinctly higher on the basal half, the shallowly punctate sulci with short and rather inconspicuous setae; that of ♀ tricarinate to three-fourths, the apical area with two admedian rows of punctures and a deep sulcus on each side. *Prothorax* slightly broader than long and distinctly constricted at the apex; sub-parallel-sided in the basal third in ♂ and then narrowing in a curve to the apex, in ♀ narrowing directly from the base; the apical margin arcuate dorsally and half the width of the base; the dorsum with large and fairly close punctures on the disk, where they are of approximately equal size but becoming rather denser in front, especially in ♀, rather smaller and much sparser laterally, particularly towards the basal angles; in ♂ a variable median impunctate line, which is more conspicuous and usually sub-costate in ♀; the pleurae with rather larger punctures than the disk, very close or sub-reticulate in front but sparse near the base; all the punctures with a short pale recumbent seta. *Elytra* elongate-ovate, widening from the base to one-fourth, then rapidly narrowing to the apex, which is broadly rounded with a small sinuation at the suture; the basal margin truncate and not elevated;

the rows of punctures well marked throughout, shallowly striate even on the disk (though the striation is occasionally obsolete in ♂), each with a much larger puncture at the base, except rows 7 and 8 which unite at a little distance before reaching the base ; the intervals each with a single row of widely spaced minute punctures, but on interval 1 these punctures are very numerous and smaller than those in stria 1 ; a few minute setae near the apex only. *Legs* with short, sparse, recumbent, white setae, without any scales ; the femora not toothed, the outer face with two rows of punctures that become sulcate apically, the dorsal surface rather irregularly punctate ; the front tibiae with the inner apical angle rounded, the hind pair with no spine above the base of the uncus, and no fringe in ♂.

Length : 2.5–2.8 mm. ; breadth, 1.3–1.4 mm.

Tutuila : Pago Pago, 12 ♂♂, 12 ♀♀, iv.1924 (Bryan).

*Type* in the Bishop Museum, Honolulu.

#### 41. *Trigonopterus samoanus*, Heller.

*Idotasia samoana*, Heller, *Denks. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 696, 1913.

Upolu : 2 ♂♂, 1905 (Dr. Rechingner).

This species is not represented in the collections here dealt with, but, thanks to the courtesy of Dr. van Emden, I have been able to examine the typical specimens from the Dresden Museum.

#### 42. *Trigonopterus binotatus*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 591, 1921.

Tutuila : 1 ♂, 22.ix.1918 (Dr. H. C. Kellers).

This species likewise is unrepresented in the material now before me.

The following key will probably facilitate the identification of the nine Samoan species of this somewhat difficult genus.

- 1 (6). Inner apical angle of front tibiae produced into a sharp point ; pronotum finely punctate ; hind tibiae with a short sub-apical spine on the dorsal edge just above the base of the uncus (sometimes broken off) (text-fig. 17, *d*).
- 2 (5). Punctures on lateral inflexed area of elytra extremely minute or obsolete, except at base and apex ; front tibiae of ♂ not excised on the apical half of the inner face.

- 3 (4). Elytra at their widest not wider than prothorax in ♀, narrower in ♂; basal puncture in stria 1 as large as that in 2; ♂ with the mid tibiae broadly dilated inwardly at the apex, and the hind tibiae fringed with long, curled hairs (text-fig. 17, b) . . . . . *crinipes*, sp. n.
- 4 (3). Elytra distinctly wider than the prothorax in both sexes, the basal puncture in stria 1 much smaller than that in 2; tibiae of ♂ simple . . . . . *submetallicus*, Mshl.
- 5 (2). Punctures on lateral inflexed area of elytra strong and distinct throughout; front tibiae of ♂ excised on the apical third of the inner face, forming an obtuse angulation at one-third from apex (text-fig. 17, c) . . . . . *caesipes*, sp. n.
- 6 (1). Inner apical angle of front tibiae rounded.
- 7 (8). Pronotum finely punctate; hind tibiae with a short sub-apical spine on the dorsal edge; colour, metallic bronze; length, 4.2-4.5 mm. . . . . *aeneoniveus*, Fairm.
- 8 (7). Pronotum coarsely punctate; hind tibiae without a sub-apical spine; colour, black or chestnut-brown; length, 2.7-3.3 mm.
- 9 (10). Prothorax not constricted at apex; row 8 on elytra much abbreviated, visible only on the apical half . . . . . *bicolor*, Mshl.
- 10 (9). Prothorax constricted at apex; row 8 on elytra nearly reaching the base.
- 11 (12). Front femora closely serrate on the lower edge (text-fig. 17, a); prothorax gradually narrowing from middle to base; basal margin of elytra strongly costate, the basal puncture in each row not or but slightly larger than the succeeding punctures, the punctures on interval 1 much smaller and much more numerous than those in stria 1 . . . . . *serratipes*, sp. n.
- 12 (11). Front femora not serrate; posterior half of prothorax parallel-sided or widening from middle to base; basal margin of elytra not or but slightly costate (*binotatus*), the basal puncture in each row much larger than the others.
- 13 (14). Prothorax with a smooth median line in ♂, which is usually sub-costate in ♀; punctures on interval 1 of elytra much smaller and much more numerous than those in stria 1; median carina on rostrum higher than the lateral ones; hind femora without scales . . . . . *bryani*, sp. n.
- 14 (13). Prothorax without any smooth median line; punctures on interval 1 of the same size as and but little more numerous on the disk than those in stria 1; median carina on rostrum not higher than the lateral ones.
- 15 (16). Median carina on rostrum not broader than the lateral ones; elytra without a sub-apical patch of dense scales; posterior pairs of femora without scales . . . . . *samoanus*, Hllr.
- 16 (15). Median carina on rostrum much broader than the lateral ones; elytra with an elongate sub-apical patch of dense scales between striae 3 and 6; posterior pairs of femora with a dorsal row of elongate white scales . . . . . *binotatus*, Mshl.



43. *Ampagia cribrellicollis*, Fairmaire.

*Trigonopterus cribrellicollis*, Fairmaire, *Ann. Soc. Ent. France*, (6) i, p. 316, 1881.

The type of this species cannot now be traced, and the description does not agree with any species of *Trigonopterus* known to me. Fairmaire states that his specimen had lost both its head and its legs, and it is therefore not unreasonable to assume that it was also abraded. Allowing for this, his description agrees quite satisfactorily with an *Ampagia* that occurs on Upolu and Tutuila, the scaling of which appears to be easily rubbed off. The following is a fuller description.

Colour piceous black, with the antennae, apex (or whole) of tarsi, tibiae (occasionally), and sometimes the dorsal part of the elytra above row 5, red-brown; the dorsum only of the prothorax with moderately dense blackish-brown and fulvous scales, sometimes one and sometimes the other predominating, and with a few scattered whitish scales; the pleurae with very sparse brown scales; the elytra dorsally (as far as row 5) with similar fulvous scales and very variable patches of white and blackish scaling, the lateral areas quite bare.

*Head* with dense black, brown or fulvous scales and a row of sub-erect pale scales round the eye-margins. *Rostrum* as wide at base as at apex, with the sides sinuate; in ♂ closely and strongly punctate in apical half, longitudinally rugose in basal half; in ♀, the punctures much finer and separated, rugose only at extreme base. *Prothorax* conical, almost straight at the sides, not constricted in front, the apical margin broadly arcuate, the base shallowly bisinuate; the dorsum strongly convex longitudinally, closely punctate throughout, the punctures becoming larger laterally and showing a slight tendency to become longitudinally confluent in front; the pleurae much more sparsely punctate, especially in the middle; the dorsal scales all rather broadly sub-triangular, those on the pleurae somewhat narrower. *Elytra* narrowly sub-elliptical, roundly narrowing to the apex; the punctures in rows 1-4 small and widely separated, except at the base and apex where they are rather larger and close, those in row 5 equally numerous but much larger than the ones in 1-4; the punctures in rows 6-7 larger still, but fewer in the basal two-thirds and much reduced towards the apex, in row 7 a larger space between the 2nd and 3rd (or 3rd and 4th) punctures, and a similar or larger one in row 8 between the 3rd and 4th punctures; the punctures again slightly smaller and more numerous in row 9, which is distinctly striate in the apical third or fourth; and row 10 ceasing entirely at

the hind coxa. *Venter* with the elevated median area of the basal ventrite quite flat and rather rugosely punctate throughout; the anal ventrite only half as long as its basal width and rugosely punctate.

Length: 3.0–3.3 mm.; breadth, 1.2–1.4 mm.

Upolu: Apia, 1 ♀, 8.v.1925 (Wilder); Malololelei, 1 ♂, 1 ♀, iv.1925.

Tutuila: Pago Pago, 1 ♂, 12.iv.1924 (Bryan); Fagasa, 1 ♀, 8.ix.1923 (Swezey and Wilder).

Savaii: Safune, 1 ♂, 12.v.1924 (Bryan).

The male specimen from Malololelei is treated as a neotype.

#### 44. *Ampagia semisuturalis*, sp. n.

♂. Colour shiny black, the basal half of the elytra (except the actual base) as far as row 6 or 7, the basal half of the venter, and the apex of the tarsi, red-brown; prothorax rather thinly clothed with black scales, with a few white ones scattered on the middle of the disk in the basal half and others along the apical margin down to the front coxae; elytra with a narrow common band of black scales along the basal margin as far as row 7, a broad stripe of dense fulvous scales on interval 1 from the basal band to the middle, which continues as a broader stripe (on intervals 1 and 2) of less dense black scales, ultimately expanding to cover the whole apex except for some indefinite patches of white scales externally; a few white squamiform setae in the fulvous sutural stripe and a few more on the adjoining bare intervals; legs with black scales and scattered white ones, with a dense stripe of white scales along the upper and lower edges of the femora.

Structurally very similar to *A. cribrellicollis* and differing principally as follows: *Rostrum* of ♂ with a smooth median stripe on the apical half. *Prothorax* with the punctures on the dorsum rather more elongate and much more definitely confluent longitudinally in front, those on the pleurae more numerous and more evenly distributed. *Elytra* narrowly ovate, more rapidly narrowed behind the middle, the sides being there almost straight; the posterior declivity less steep; the punctures in the rows 1–4 distinctly smaller than in *A. cribrellicollis*, those in 5 hardly smaller than in the upper rows, no definite spaces in rows 7 and 8, and row 10 continued to the apex as a sharp, shallowly punctate stria. *Venter* with the elevated area of the basal ventrite (♂) shallowly impressed down the

middle and there devoid of punctures ; the length of the anal ventrite two-thirds of the basal width, the punctures close and deep but not rugose.

Length : 3.3 mm. ; breadth, 1.2 mm.

Upolu : Malololelei, 1 ♂, 20.iv.1925.

#### ZYGOPINAE.

##### 45. *Mecopus trilineatus*, Guérin.

*Voy. Coquille*, p. 126, 1830 ; *Icon. Règne Anim.*, v, pl. 39, fig. 8.

Upolu : Apia, 17 ♂♂, 14 ♀♀, v., vii.1924.

#### BARIDINAE.

##### *Eremonyx*, gen. nov.

*Head* separated from the rostrum by a transverse depression ; the frons as broad as the rostrum in its basal half. *Rostrum* comparatively short and stout, more or less compressed at the base, scarcely narrowed dorso-ventrally from base to apex, and with the antennae inserted at or a little beyond the middle ; the mandibles bidentate and decussate. *Antennae* with joint 7 of the funicle not annexed to the club, and the basal joint of the club shiny and sparsely setose. *Legs* with the posterior pairs of femora shallowly sulcate beneath ; the tarsi with the claw joint unusually short and bearing only a single claw ; trochanters with a single seta. *Sternum* with a shallow prosternal furrow, the space between the front coxae at least as broad as a coxa, and the median post-coxal piece not produced backwards ; the mesosternum depressed transversely at the base, and the intercoxal process much wider than a coxa. *Pygidium* vertical, short, strongly transverse, and more or less impressed.

Genotype, *Eremonyx samoanus*, sp. n.

This genus is the only one of the BARIDINAE known to me that has only a single claw on the tarsi. It belongs to Casey's group BARINI, and in general facies closely resembles *Baris*, but this latter genus, in addition to its two free tarsal claws, differs in having the front coxae much more closely approximated ; the femora are not sulcate beneath ; the trochanters bear no seta ; and the pygidium is much longer, almost semicircular, and distinctly convex.

46. *Eremonyx samoanus*, sp. n.

♀. Uniformly black, not very shiny, entirely devoid of scaling.

*Head* separated from the rostrum by a rather shallow transverse impression containing a deep median fovea ; the forehead with large close punctures, which rapidly become small and sparse behind and are entirely lacking on the vertex. *Rostrum* rather strongly and regularly curved, reaching to about the hind margin of the prosternum, parallel-sided to near the apex and there slightly dilated, strongly and confusedly punctate at the base and then with four dorsal rows of punctures to the antennae, leaving a smooth median line that widens anteriorly ; the apical area with rather smaller and less regular punctures. *Antennae* with the scape about as long as joints 1-4 of the funicle ; the latter with joint 1 as long as 2+4 and bearing a patch of stiff dark setae at its apex, and joints 3-7 transverse and very gradually widening distally. *Prothorax* about as long as broad, almost parallel-sided from the base to the middle, then narrowing in a curve to the apex, and with the sub-apical constriction invisible from above ; the dorsum convex longitudinally, highest a little behind the middle, fairly evenly set throughout with large round separated punctures leaving an irregular and variable smooth median line, the interspaces being always narrower than the punctures ; the pleurae with the punctures closer together. *Scutellum* broadly rounded at the apex and very shallowly impressed in the middle. *Elytra* narrowly ovate, widest a little behind the oblique and only slightly prominent shoulders, very gradually narrowing behind, broadly rounded at the apex, without any dorsal impressions, and with the posterior callus very feeble ; the striae strong, broader at the base and apex, and containing shallow distant punctures that are not broader than the striae ; the intervals flat, more or less alutaceous, each with a row of spaced punctures, which are larger at the base. *Legs* black, coarsely punctate ; the front femora obtusely denticulate on the lower edge in the basal half. *Sternum* with coarse, close punctures, but those on the middle of the metasternum smaller and less close. *Venter* with the punctures on the two basal ventrites like those on the middle of the metasternum but rather more distant ; ventrites 3 and 4 (5 and 6) with a single transverse row of punctures in the middle and two at the sides.

Length : 2.25-2.75 mm. ; breadth, 0.75-0.9 mm.

Upolu : Malololelei, 1 ♀, 20.iv.1925 (type).

Tutuila : 1 ♀ (Swezey and Wilder).

The Tutuila specimen is larger, and has the punctures on the elytra smaller and those on the venter rather larger than in the type.

47. *Eremonyx rufoplagiatus*, sp. n.

♀. Black, not very shiny; the elytra with a large ill-defined, common, red-brown patch extending from before the middle to the top of the declivity, almost reaching the lateral margins, and deeply sinuate in front and behind.

Nearly allied to *E. samoanus*, but differing from it *inter alia* in the following characters: *Head* separated from the rostrum by a deep stria, which contains no fovea. *Rostrum* gently curved in the basal half and straight in the apical half, and extending well beyond the hind margin of the prosternum. *Antennae* with the scape as long as joints 1-6 of the funicle; joint 1 of the latter as long as 2+3+4 and bearing a patch of pale setae at the apex. *Prothorax* with a feeble sub-apical constriction visible from above; the punctures smaller and sub-confluent laterally in the apical half, larger and more distant in the basal half, where the interspaces are sometimes even wider than the punctures. *Elytra* with the punctures on the intervals much reduced, being practically obliterated on the disk. *Legs* with two sharp teeth on the basal half of the front femora. *Venter* with the punctures much smaller than those on the middle of the metasternum.

Length: 2.25 mm.; breadth, 0.75 mm.

Tutuila: 1 ♀ (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

48. *Omobaris lucens*, sp. n. (Text-figs. 18, 19, a).

♀. Black, very shiny, bare, except for some elongate whitish scales laterally on the basal half of the rostrum, and similar scales down the middle of the prosternum.

*Head* with the vertex almost impunctate, the forehead with close, strong punctures and a median fovea. *Rostrum* stout, gently curved, about as long as the pronotum, with strong, dense punctures at the base, which rapidly become much finer and sparser to the middle, the apical half being impunctate. *Antennae* black; joint 1 of the funicle somewhat longer than 2+3, 2-4 a little longer than broad, 5 and 6 sub-quadrate, 7 transverse. *Prothorax* a little broader than long,

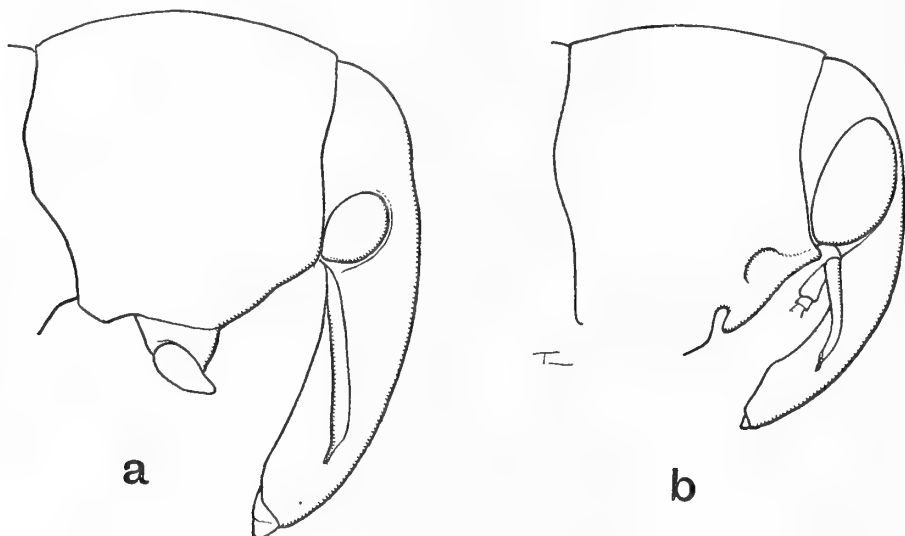
narrowing with a slight curve from base to apex, without any sub-apical constriction; the apex truncate dorsally and two-thirds the width of the base;



TEXT-FIG. 18.—*Omobaris lucens*, sp. n., ♀.

the dorsum longitudinally convex, highest at the middle, strongly punctate, the interspaces being about as wide as the punctures, and with a well-defined complete median impunctate line; the pleurae with similar but more distant

punctures. *Scutellum* small, rounded, with a transverse impressed line. *Elytra* sub-triangular, widest just behind the obtusely rounded shoulders, and rapidly narrowing from there to the narrowly rounded apex, without any sub-apical constriction or posterior calli; the striae fine but deep, containing small punctures that are larger and closer near the base and become much smaller and more distant behind, the punctures slightly indenting the margins of the striae; the intervals broad, flat and shiny, with extremely minute punctures, usually forming an irregular row. *Legs* black, with very sparse minute sub-recumbent setae, only the tarsal claws and tibial uncus red; the femora comparatively



TEXT-FIG. 19.—Head and prothorax, lateral view, of: (a) *Omobaris lucens*, sp. n., ♀; (b) *Nesobaris tutuilae*, sp. n., ♂.

slender; feebly clavate, with fine sparse punctures on the basal half or two-thirds, the apical area coarsely punctate; the tibiae opaque, with obsolescent punctures and no carinae; the tarsi long and slender, joint 2 longer than broad. *Underside* coarsely punctate on the sternum; the basal ventrite with smaller, more distant punctures, the remaining ventrites with very sparse, minute punctures.

Length: 3.7 mm.; breadth, 1.4 mm.

Upolu: Malololelei, 2,000 ft., 1 ♀, vi.1924.

In its general form and shiny surface this insect strongly resembles certain species of the Cryptorrhynchine genus *Trigonopterus*. It is provisionally

referred to the Malayan genus *Omobaris*, Marshall (*Bull. Ent. Res.*, xvii, p. 217, 1927),\* but differs from the only other known species in its sub-conical prothorax, tapering elytra, slender tarsi, and the spine at the inner apical angle of the tibiae.

*Nesobaris*, gen. nov.

*Head* with the eyes very large and the frons much narrower than the base of the rostrum. *Rostrum* with its dorsal outline continuous with that of the head, narrowed dorso-ventrally in its apical half, and with the antennae inserted well beyond the middle; the mandibles bidentate and decussate. *Antennae* with joint 7 of the funicle closely annexed to the club. *Prothorax* with the apex truncate dorsally and laterally, and the base shallowly bisinuate. *Legs* with the femora only slightly clavate, not sulcate or toothed beneath; the tibiae not widening distally, the inner apical angle acute at least on the front pair; the tarsi with the claws free and very small; the trochanters with an erect seta. *Sternum*: the prosternum deeply sulcate in front, truncate at the base; the mesosternum transversely impressed, the intercoxal space wider than a coxa. *Pygidium* concealed from above, but narrowly visible ventrally.

Genotype, *Nesobaris tutuilae*, sp. n.

This genus appears to agree in many respects with the description of *Solenobaris*, Lea 1906, but the latter differs in having the antennae inserted in the middle of the rostrum, the prosternal furrow invades the mesosternum, and the pygidium is distinctly exposed.

49. *Nesobaris tutuilae*, sp. n. (Text-figs. 19, *b*; 20).

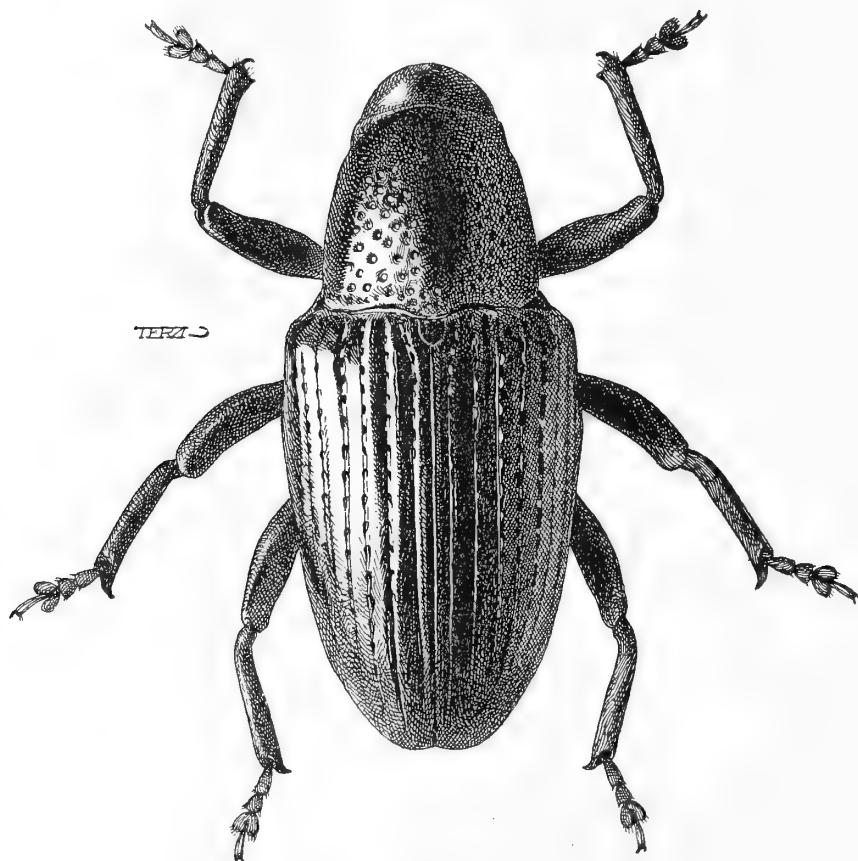
♂. Colour black, not very shiny, bare, with the legs piceous.

*Head* quite continuous with the rostrum, alutaceous and scarcely punctate, except on the frons, which is much narrower than the base of the rostrum and bears a few punctures but no fovea. *Rostrum* not reaching the base of the prosternum, rather strongly curved dorsally, distinctly narrowed dorso-ventrally towards the apex, and with the antennae inserted in front of the middle; the dorsum with irregular rows of punctures in the basal half leaving a narrow abbreviated smooth median line; the punctures with extremely minute setae.

\* In the description of this genus it is erroneously stated that the outer apical angle of the tibiae is not produced; for "outer" read "inner."



*Antennae* with the scape about as long as joints 1-5 of the funicle, the latter with joints 3-7 transverse and scarcely widening distally; the basal joint of the club transverse and shorter than the rest of the club. *Prothorax* about as long as broad, widest at the base and gradually narrowing to the apex, with the sides gently rounded and the very shallow sub-apical constriction scarcely noticeable from above; the dorsum feebly convex longitudinally, highest at one-third



TEXT-FIG. 20.—*Nesobaris tutuilae*, sp. n., ♂.

from the base, alutaceous, with fairly large separated shallow punctures and without any definite smooth median line, the spaces between the punctures mostly much wider than the punctures; the pleurae with the upper half more deeply and closely punctate than the dorsum, the lower half impunctate. *Scutellum* transverse and shallowly impressed in the middle. *Elytra* ovate, widest at the very prominent shoulders and gradually narrowing behind, without

any discal impressions or posterior calli ; the striae deep, but becoming shallower towards the apex and containing deep, distant punctures, which are slightly wider than the striae and also diminish behind, the punctures in striae 1 and 2 being rather more numerous than in the others ; the intervals broader than the striae, flat, alutaceous, and each with a row of fine spaced punctures, which contain minute, speck-like, pale setae. *Legs* comparatively long and slender, with scattered shallow punctures and very short, pale, recumbent setae ; the posterior pairs of femora feebly sulcate on the lower face ; only the front tibiae dilated at the apex and with a short, sharp tooth at the inner angle ; the tarsi with the claw-joint of normal length, the claws small and dark, the third joint with the lobes rather widely spread and sub-equal, the second as long as or longer than broad. *Sternum* with the lateral ridges of the pectoral furrow showing a short continuation behind the front coxae, a very large deep fovea on each side of the furrow, the piece between the front coxae much narrower than the antennal club, and the hind margin of the prosternum arcuate in the middle ; the mesosternal process wider than a coxa. *Venter* with two transverse rows of punctures on ventrite 2 (4), and ventrites 3 and 4 (5 and 6) with a single row and additional punctures at the sides.

Length : 1.6–1.8 mm. ; breadth, 0.6–0.7 mm.

Tutuila : Pago Pago, 2 ♂♂, 16–18.iv.1924 (Bryan).

*Type* in the Bishop Museum, Honolulu.

#### 50. *Nesobaris parvungulis*, sp. n.

♂. Colour uniform dull black, without scaling.

*Head* quite continuous with the rostrum, alutaceous and with a few shallow punctures ; the eyes large, the frons narrower than the base of the rostrum and without any fovea. *Rostrum* not reaching the base of the prosternum, not very stout, only slightly curved, not narrowed dorso-ventrally at the apex, and with the antennae inserted at one-third from the apex ; four rows of confluent punctures in the basal half, the median space the broadest ; each puncture containing a short recumbent pale seta. *Antennae* with the scape about as long as the funicle, the latter with joints 3–7 transverse and slightly widening distally ; the basal joint of the club a little longer than broad and much longer than the rest together. *Prothorax* a little broader than long (5 : 4), gently rounded at the sides, widest behind the middle, distinctly constricted

near the apex, and with the constriction continued shallowly across the disk ; the dorsum distinctly convex longitudinally, highest behind the middle, fairly evenly set with strong separated punctures, without any smooth median line, the interspaces often as wide as the punctures on the disk but not laterally, and without any setae ; the pleurae closely punctate down to the coxae. *Scutellum* small and circular. *Elytra* oblong-ovate, with the shoulders oblique and not very prominent, almost parallel-sided from there to the middle, and then gradually narrowing behind, without any discal impressions or posterior calli ; the striae equally deep throughout and containing distant shallow punctures, which are slightly wider than the striae only near the base ; the intervals broader than the striae, flat, alutaceous, and each with a row of small shallow spaced punctures. *Legs* with sparse short pale setae ; the femora shallowly punctate, the posterior pairs flattened or feebly sulcate on the lower face ; the tibiae not dilated apically, the front pair with a short, sharp tooth at the inner apical angle ; the tarsi with the claw-joint comparatively short and the claws minute and pale, the third joint with one lobe markedly larger than the other, the second joint transverse. *Sternum* with the lateral ridges of the pectoral furrow not continued behind the coxae, the fovea on each side of the furrow inconspicuous, the piece between the front coxae as wide as the antennal club ; the hind margin of the prosternum arcuate in the middle ; the mesosternal process wider than a coxa. *Venter* with two transverse rows of punctures on ventrite 2 (4), and ventrites 3 and 4 (5 and 6) with a single row and additional punctures at the sides.

Length : 1·8 mm. ; breadth, 0·6 mm.

Upolu : Malololelei, 2,000 ft., 1 ♂, 22.xi.1924.

This is a somewhat aberrant species, which in its general shape quite resembles a diminutive *Baris* ; its tarsal structure is also unusual.

#### CALANDRINAE.

##### 51. *Diathetes buxtoni*, sp. n.

♂. Colour black, with the elytra chestnut-brown ; the pronotum shiny, with a bi-lateral, grey, sericeous stripe ; the mesepimeron also with a grey, sericeous indumentum.

*Head* moderately shiny, with small, scattered, shallow punctures and with a fine stria round the posterior margin of the eyes. *Rostrum* regularly curved,

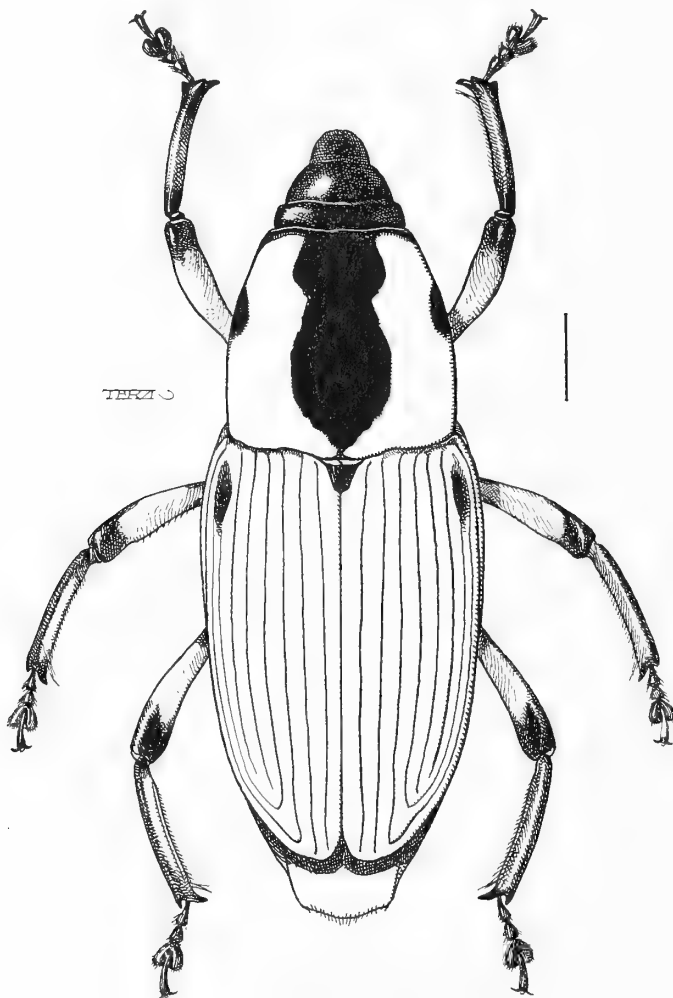
parallel-sided from the base to the insertion of the antennae, there distinctly narrowed, and thence sub-cylindrical to the apex, which is not dilated ; the basal portion with fairly numerous, distinct, separated punctures and with a shallow median stria, which terminates at the extreme base in a very deep, round fovea ; the cylindrical portion with irregularly distributed smaller punctures dorsally and laterally in its basal half only ; the underside with rather irregular rows of coarse, subrugose punctures. *Antennae* with the club almost as broad as long and distinctly asymmetrical, the outer (or lower) edge being more strongly angulated. *Prothorax* broadest at the base and narrowing anteriorly with a gradual curve, constricted close to the apex, but not tubulate, the constriction not extending across the dorsum, and the apical margin shallowly sinuate in the middle ; the dorsum shiny, with extremely minute distant punctures in the basal half, these becoming gradually stronger and denser towards the apex ; the lateral thoracic stripes reaching the base, but ceasing at some distance behind the apical constriction and covering scattered punctures that each contain a very small recumbent seta ; the pleurae with coarse, often somewhat wrinkled punctures, except in the area above the coxa, where the punctures are much smaller. *Elytra* ovate, widest at the very oblique shoulders and distinctly narrowing from there to the apex ; striae 1-4 very deep and containing feeble, remote punctures, the outer striae shallow and with more distinct punctures, stria 2 curving strongly inwards at the base, so that interval 2 is there narrower than the others (except 1), 3 is as broad as 4+5, and 4 is about as wide as 6 and narrower than 5 ; the intervals slightly convex and impunctate, probably covered normally with dull pruinosity, but partly abraded and shiny in the type. *Legs* black, stout ; the femora with minute scattered punctures, which become larger and squamose on the apical fourth, the lower surface densely punctate and bearing an erect fringe of short, stiff, red setae (probably a male character only) ; the front tibiae alone with a very short process at the outer apical angle ; only the front coxae with a small tuft of red setae. *Sternum* : the prosternum with deep, distant punctures in front of the coxae ; the mesosternum with only a few fine punctures on the episterna ; the metasternum with strong, remote punctures at the sides, dense, fine ones in the median area, and almost impunctate elsewhere. *Pygidium* broadly rounded at the apex and fairly closely set with coarse punctures, each containing a very short recumbent seta.

Length : 13.25 mm. ; breadth, 5.75 mm.

Upolu : Apia, 1 ♂, 5.iv.1924.

52. *Diathetes lyriger*, sp. n. (Text-fig. 21).

♂. Head and rostrum black; prothorax black beneath, pale, testaceous above, with the apical collar black, a large median lyre-shaped black patch extending from base to apex, and a small black patch on each side in front of



TEXT-FIG. 21.—*Diathetes lyriger*, sp. n., ♂.

the middle, which is connected with the inferior black area; the elytra darker than the pronotum and more or less pruinose, with the suture and humeral callus somewhat infuscated; the underside shiny black, with a large sub-oblong testaceous patch on each side of the metasternum.

*Head* shiny, with obsolescent punctures and no post-ocular stria. *Rostrum* short and regularly curved, very gradually narrowing from the base to the middle and thence parallel-sided; the basal part with fine, obsolescent punctures and a shallow median stria that terminates in a large basal fovea; elsewhere impunctate; the underside with two rows of small, very obtuse denticles. *Antennae* with the club longer than broad, almost symmetrical, and scarcely angulated at the sides. *Prothorax* almost parallel-sided from the base to one-third, thence gradually narrowed anteriorly and deeply constricted at some distance from the apex, the constriction being continued across the dorsum; the apical portion tubulate and as long as the greatest width of the antennal club, its front margin being shallowly sinuate in the middle; the dorsum very shiny, the punctures everywhere very minute and obsolescent; the pleurae with a few larger punctures. *Elytra* narrowly ovate, widest at the very oblique shoulders and very gradually narrowing behind; striae 1-4 moderately deep and with distinct, shallow punctures, the outer striae shallow, stria 2 only slightly curved inwards at the base, intervals 2, 4, 5, 6 being sub-equal at the base and 3 somewhat broader; the intervals slightly convex and impunctate, with more or less dull pruinosity. *Legs* slender; the coxae and tarsi black; the femora testaceous, with the base and apex blackish, impunctate, and with a very short, sparse, fringe of pale setae on the lower surface; the tibiae testaceous brown with the base and apex and the dorsal edge blackish, the external apical angle being produced into a sharp point on every pair; the front coxae without a tuft of setae. *Sternum* with only a few small, sparse punctures on the prosternum and at the sides of the metasternum. *Pygidium* broadly truncate at the apex, the coarse punctures almost concealed by an indumentum, and each containing a short, sub-erect seta, the lateral and apical margins with a dense fringe of golden setae.

Length: 10.5 mm.; breadth, 4.0 mm.

Upolu: Malololelei, 2,000 ft., 1 ♂, 28.vi.1924.

### 53. *Cosmopolites sordidus*, Germar.

*Calandra sordida*, Germar, *Ins. Spec. nov.*, p. 299, 1824.

*Sphenophorus striatus*, Fåhræus, *Schoenh. Gen. Curc.*, viii, pt. 2, p. 251, 1845.

*Sphenophorus cribricollis*, Walker, *Ann. Mag. Nat. Hist.*, (3) iv, p. 218, 1859.

Upolu: Apia, 2 ♂♂, 7 ♀♀, ix.1923; 21 ♂♂, 14 ♀♀, from rotten banana stumps, xi.1924; Tuaeфу, 1 ♀, 16.ix.1923 (Swezey and Wilder).

Tutuila : Pago Pago, 3 ♂♂, 1 ♀, ix.-x.1923 (J. Steffany); Leone Road, 2 ♂♂, 3 ♀♀, 7.ix.1923; Fagasa, 2 ♂♂, 1 ♀, in banana, 8.ix.1923 (Swezey and Wilder).

A pest of bananas; distributed throughout the tropics.

#### 54. *Rhabdocnemis obscura*, Boisduval.

*Calandra obscura*, Boisduval, *d'Urville's Voy. de l'Astrolabe*, Ent., ii, p. 448, 1835.

*Sphenophorus insularis*, Boheman, *Eugenies Resa*, Ins., p. 148, 1859.

*Sphenophorus nudicollis*, Kirsch, *Mitt. Mus. Dresden*, ii, p. 156, 1877.

*S. promissus*, Pascoe, *Ann. Mus. Genova*, (2) ii, p. 300 1885 (n. syn.).

*S. tincturatus*, Pascoe, *op. cit.*, p. 301.

*S. beccarii*, Pascoe, *loc. cit.*

*S. interruptocostatus*, Schaufuss, *Hor. Soc. Ent. Ross.*, xix, p. 204, 1885.

Upolu : Apia, 1 ♂, 1 ♀, 14.ix.1923 (Swezey and Wilder), 7 ♂♂, 8 ♀♀, v.-xii. 1924; Malololelei, 1 ♂, 2 ♀♀, vi.-vii.1924; Aleipata, 2 ♀♀, xi.1924.

Tutuila : Pago Pago, 3 ♂♂, 1 ♀, 20.ix.1923; Fagasa, 4 ♂♂, 7 ♀♀, in coconut and sugar-cane, 8.ix.1923 (Swezey and Wilder); Amauli 1 ♂, 5.ix.1923 (Bryan), 1 ♂, 6.ix.1923 (Swezey and Wilder).

A common pest of sugar-cane, occurring from Celebes to the Pacific islands and Australia.

#### 55. *Polytus mellerborgi*, Boheman.

*Sitophilus mellerborgi*, Boheman, *Schoenh. Gen. Curc.*, iv, p. 976, 1837.

*Calandra remota*, Sharp, *Trans. Roy. Dublin Soc.*, (2) iii, pp. 183, 254, 1885.

*Polytus mellenborgi*, Faust, *Ann. Mus. Genova*, xxxiv, p. 353, 1894.

Upolu : Apia, 2 ♂♂, 2 ♀♀, in rotten banana stem, xi.1924, 1 ♀, x.1925.

A tropical species ranging from the Seychelles to the Pacific.

#### 56. *Calandra oryzae*, Linnaeus.

*Curculio oryzae*, Linnaeus, *Amoen. Ac.*, vi, p. 395, 1763.

*Cossonus quadrimacula*, Walker, *Ann. Mag. Nat. Hist.*, (3) iv, p. 219, 1859.

Upolu : Apia, 12 ♂♂, 1 ♀, in oats, iv.1924.

#### 57. *Diocalandra taïtensis*, Guérin.

*Calandra taïtensis*, Guérin, *Icon. Règne anim.*, v, pl. xxxix bis, fig. 4, 1844.

Upolu : Apia, 1 ♂, vii.1924, 4 ♂♂, 4 ♀♀, in spathe of coconut, x.1924, 6 ♂♂, 2 ♀♀, xi.1924; 1 ♀, v.1925; Lalomanu, 1 ♀, xi.1924.

Tutuila : Amauli, 4 ♂♂, 4 ♀♀, xi.1923 (Bryan).

Manu'a : Tau, 1 ♂, 1 ♀, 27.ix.1923 (Swezey and Wilder).

58. *Diocalandra frumenti*, Fabricius.

*Calandra frumenti*, Fabricius, *Syst. El.*, ii, p. 438, 1801.

*Sitophilus stigmaticollis*, Gyllenhal, *Schoenh. Gen. Curc.*, iv, p. 972, 1837.

*Sitophilus subsignatus*, Boheman, *Schoenh. Gen. Curc.*, iv, p. 973, 1837.

*Sphenophorus cruciger*, Motschulsky, *Etud. Ent.*, vii, p. 69, 1858.

*Calandra punctigera*, Pascoe, *Ann. Mus. Genova*, (2) ii, p. 305, 1885 (n. syn.).

*Calandra sechellarum*, Kolbe, *Mitt. Zool. Mus. Berlin*, v, p. 46, 1910.

Tutuila : Amauli, 1 ♂, 6.ix.1923 (Swezey and Wilder).

This species ranges from East Africa (Tanganyika Territory) eastwards to Papua, but the specimen here recorded is the first that I have seen from any Pacific island.

## COSSONINAE.

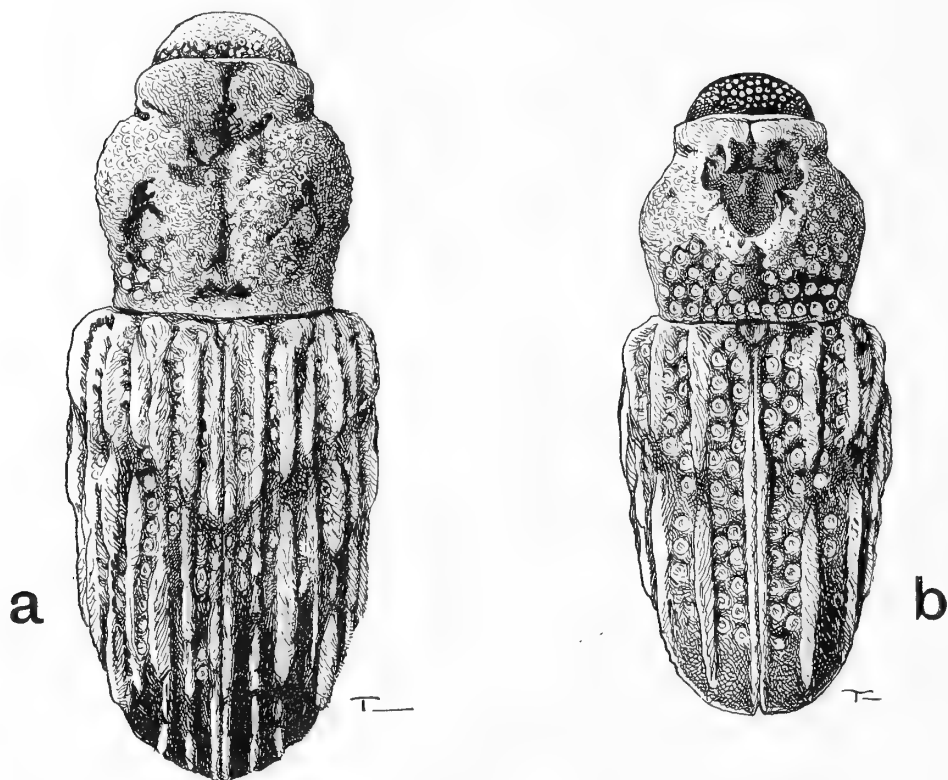
59. *Dryophthorus muscosus*, sp. n. (Text-fig. 22, a).

♀. Derm black, with patches and tufts of yellowish grey pubescence.

*Head* with reticulate punctation, the forehead with a median impression and a patch of very short, erect setae on each side of it; eyes quite flat. *Rostrum* parallel-sided from the base to the middle (apart from the usual angular projection of the lower edge of the scrobes) and thence rapidly widening to the apex; the apical area very shiny and impunctate, its anterior edge broadly arcuate with a small median emargination and a small projection on each side of it; the remainder with dense, matted pubescence concealing the sculpture, except for an indefinite median impression near the base. *Prothorax* very nearly as long as broad, gradually widening from the base, then strongly rounded beyond the middle, and very deeply constricted near the apex, the constriction continued on the dorsum and running obliquely backwards to join a deep median depression at about one-third from the apex; in the basal half a similar large, rounded depression on each side; the rest of the surface with large, sub-reticulate punctures, which are for the most part hidden by matted pubescence mingled with short, erect setae; a complete, narrow, smooth median line. *Elytra* ovate, widest before the middle, rounded at the apex, and sub-truncate at the base; the striae coarsely punctate, and all the intervals with more or less interrupted ridges of matted pubescence, those on intervals 3 and 5 higher than the others, and the major interruption caused by an oblique, bare band running from a little behind the shoulder to the suture behind the middle; on interval 3 the ridge is divided into three patches: a small one at the base, a long one before



and a long one behind the middle ; on interval 5 there are three long patches : near the base, at the middle, and near the apex ; on the other intervals the



TEXT-FIG. 22.—(a) *Dryophthorus muscosus*, sp. n., ♀; (b) *D. armaticollis*, sp. n., ♂.

ridges are more irregularly interrupted ; interval 7 elevated into a high carina at the apex.

Length : 3.5 mm. ; breadth, 1.5 mm.

Upolu : Malololelei, 2,000 ft., 1 ♀, vi.1924.

60. *Dryophthorus armaticollis*, sp. n. (Text-fig. 22, b).

♂. Derm black, with patches and ridges of yellowish grey pubescence.

*Head* with sub-reticulate punctation and with a very shallow, indefinite, transverse impression behind the eyes, the forehead with very short, erect setae ; eyes quite flat. *Rostrum* parallel-sided from the base to the antennae, there widening slightly, and again parallel-sided thence to the apex ; the shiny, apical area shorter than usual, its anterior edge not emarginate but asymmetrical,

with a small projection to the right of the middle; the remainder covered with matted pubescence and with a broad, transverse impression across the basal half. *Prothorax* about as long as broad, gradually widening from the base, then strongly rounded (widest beyond the middle), and very deeply constricted near the apex; on the anterior half of the dorsum a very deep, large, sub-triangular excavation (with the apex of the triangle direct backwards), the floor of which is bare, shiny and impunctate; the anterior transverse side of the triangle bears a broad, truncate, bare process projecting backwards over the cavity, and the two oblique sides have each in the middle of their length a small, bare, projecting tooth; the rest of the dorsum with large, sub-reticulate punctures; the apical margin and a broad area on each side of the cavity clothed with matted pubescence. *Elytra* oblong-ovate, widest before the middle, the sides sub-angulated behind, the apex rather narrowly rounded, and the base truncate; the striae coarsely punctate, and only the alternate, dorsal intervals with ridges of matted pubescence: interval 1 with a very short ridge a little before the middle; intervals 3 and 5 with the ridges complete, except for a broad, oblique interruption before the middle, and interval 5 elevated into a sharp carina on the declivity; interval 7 with a much lower and shorter ridge, which is interrupted before and again behind the middle; intervals 8 and 9 each with a short, low ridge before the middle.

Length: 2.5 mm.; breadth, 1.9 mm.

Savaii: Safune, 1 ♂, 13.v.1924 (Bryan).

*Type* in the Bishop Museum, Honolulu.

The nearest ally of these two striking species is the Hawaiian *D. insignis*, Sharp 1878, but in this species the triangular anterior impression on the pronotum is shallow and distinctly punctate, having no trace of the remarkable projections characteristic of *armaticollis*, and the smooth median line and two posterior depressions of *muscosus* are also lacking; the arrangement of the elytral ridges is very similar to that in *armaticollis*, but they are borne on well-marked carinae, that on interval 7 is not interrupted, and there is no tuft on interval 1.

#### 61. *Glyphostethus cancellatus*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 596, 1921.

Upolu: Apia, 1916 (Dr. H. Swale).

This species is not represented in the collections now being dealt with.

62. *Pentarthrum cylindricum*, Wollaston.

*Trans. Ent. Soc. Lond.*, (2) v, p. 398, pl. xix, fig. 5, 1861.

Upolu: Apia, 3 specimens, v.1924; i.1925; Malololelei, 1 specimen, 25.iv.1924.

63. *Pentarthrum hirticolle*, sp. n.

♂. Piceous to black, the anterior part of the rostrum, the lateral margins of the elytra, the antennae and legs, red-brown.

*Head* very deeply constricted immediately behind the eyes, which are prominent; the globular vertex with a few very minute punctures, the forehead almost on a level with the inner margin of the eyes, strongly and closely punctate, without any median fovea. *Rostrum* rather stout, gently curved, slightly widening from the base to the middle, parallel-sided beyond; the punctures more or less longitudinally confluent at the base (especially at the sides), becoming rapidly smaller and sparser in front. *Prothorax* a little longer than broad, rounded at the sides, widest far behind the middle, broadly constricted at the apex, the constriction continued shallowly across the dorsum, which is markedly flattened and strongly and closely punctate throughout, the interspaces being narrower than the punctures, which become denser laterally and sub-confluent on the pleurae; the sides of the pronotum thinly clothed with rather long, fine, recumbent setae directed obliquely backwards. *Elytra* somewhat flattened, a little broader than the prothorax, deeply striate, the punctures large, separated and wider than the striae; the intervals each with a row of fine spaced punctures, those on interval 1 much denser, interval 9 only slightly costate at the apex; minute recumbent setae (not easily seen) at the sides and apex. *Underside* strongly and closely punctate.

Length: 2.0–2.3 mm.; breadth, 0.6–0.7 mm.

Upolu: Malololelei, 1 ♂ (type), iv.1924, 1 ♂, vi.1924; Apia, 1 ♂, v.1924.

64. *Pentarthrum naucum*, sp. n.

♀. Chestnut-brown, moderately shiny, bare.

Allied to *P. hirticolle*, sp. n.; but much narrower, more finely punctate and not flattened dorsally. Differing also in the following characters: *Rostrum* longer, more slender and almost straight. *Prothorax* distinctly longer than broad, the anterior constriction not continued across the dorsum; the punc-

tures much smaller, not wider than their interspaces (except near the base), and becoming finer anteriorly ; no lateral setae. *Elytra* not broader than the prothorax, with the dorsal punctures not wider than the striae, the intervals without setae.

Length : 2.4–2.5 mm. ; breadth, 0.6 mm.

Upolu : Apia, 2 ♀♀, xi.1924.

From the two new species of *Pentarthrum* here described, *P. cylindricum* differs in lacking the very deep constriction immediately behind the eyes ; the prothorax also is almost cylindrical, and joint 3 of the tarsi is not wider than 2.

### *Dynatopechus*, gen. nov.

*Head* sub-conical, not constricted, the forehead narrower than the base of the rostrum ; eyes widely separated beneath. *Rostrum* with the antennae inserted at the middle ; scrobes oblique, the upper edge reaching the lower margin of the eyes. *Antennae* stout, with the funicle 5-jointed, the basal joint sub-triangular and not much longer than broad, joint 2 transverse and only slightly larger than 3 ; the club ovate, slightly compressed, distinctly 4-jointed, the basal joint sparsely pubescent. *Prothorax* sub-conical, shallowly bisinuate at the base. *Elytra* as wide as the prothorax, less than twice as long as broad, with ten deep striae, the tenth being entire, and the intervals with one edge narrowly carinate, the outer edge on intervals 1–3 and the inner edge on the remainder. *Legs* short and very stout, the front femora being unusually inflated ; the tibiae not much longer than the tarsi (4 : 3), dilated from base to apex, with a very stout uncus (especially on the front pair), and a sub-median sharp tooth on the lower edge of the front pair ; the tarsi short and broad, joint 2 twice as broad as long, 3 strongly dilated and deeply bilobate, and 4 parallel-sided and exceeding 3 by only half its own length ; trochanters without a seta. *Sternum* with the front coxae nearly as widely separated as the median pair, the metepisterna very narrow. *Venter* with the inter-coxal process truncate, ventrite 2 laterally as long as 3+4.

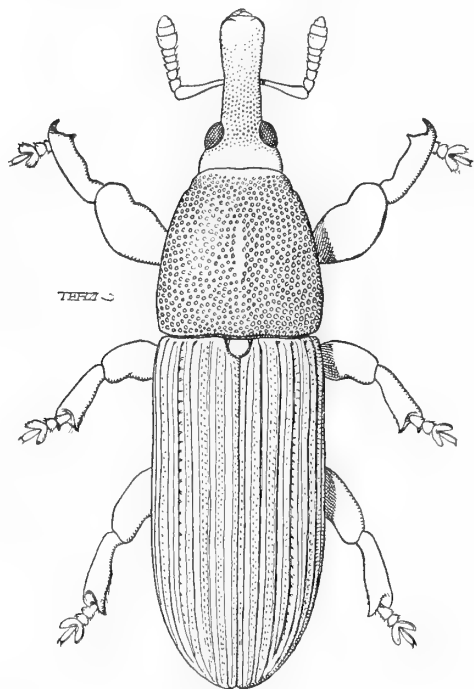
Genotype, *Dynatopechus rubronotatus*, sp. n.

*Amorphocerus aureopilosus*, Fairm. 1849, must undoubtedly be referred to this genus ; I have seen several specimens from Fiji which appear to agree adequately with Fairmaire's description.

An isolated genus, the species of which superficially resemble small specimens of *Calandra linearis*, Hbst. The salient characters are the finely carinate and pubescent elytra, unusually large front femora, 5-jointed funicle, and the short, broad tarsi with the deeply lobate third joint, which is spongy beneath.

65. *Dynatopechus rubronotatus*, sp. n. (Text-fig. 23).

♀. Colour piceous, the elytra with an indefinite reddish patch near the base, between striae 1 and 3, a similar one slightly behind the middle between striae 2 and 5, a small humeral spot, and the lateral margin narrowly reddish.



TEXT-FIG. 23.—*Dynatopechus rubronotatus*,  
sp. n., ♀.

*Head* with fine separated punctures all over the vertex, the forehead with slightly larger closer punctures and a very small median fovea, the lower surface with several deep curved transverse striae; eyes moderately convex, a little longer than the temples. *Rostrum* much shorter than the pronotum (5:8), moderately stout, sub-cylindrical, slightly curved, finely and closely punctate, the punctures becoming larger at the extreme base. *Antennae* red-brown; the funicle gradually widening distally, joints 3–5 strongly transverse, more than twice as broad as long; all the joints of the club with an apical fringe of pale pubescence. *Prothorax* slightly longer than broad, widest close to the base, rapidly narrowing in front with a slight curve, strongly constricted near the apex, the constric-

tion shallowly continued across the disk; the dorsum somewhat flattened, finely and closely punctate, with an abbreviated smooth median line, the interspaces in the middle of the disk as wide as the punctures, which become much denser, but not actually confluent, laterally, each puncture with a short, recumbent, golden seta; the pleurae with the punctures for the most part longitudinally confluent. *Elytra* parallel-sided to three-fifths, jointly

rounded at the apex, with the deep, broad striae catenulately punctate; the intervals flat (apart from the carinate edges), a little wider than the striae, and each with a row of close, strong punctures, which are duplicated towards the base on intervals 2 and 3, each puncture with a short, recumbent, golden seta, the carinae more prominent laterally and at the apex. *Legs* closely and strongly punctate; the front femora almost semicircular in shape; the upper edge being very strongly arched; the tibiae with the punctures longitudinally confluent. *Underside* finely and evenly punctate throughout.

Length: 3.2 mm.; breadth, 1.1 mm.

Upolu: Apia, 1 ♀, xii.1924.

The species provisionally identified as *D. aureopilosus*, Fairm., is usually red-brown above with a broad median blackish stripe on the pronotum, but four indefinite blackish patches sometimes occur on the elytra, and the head and underside may be black; the rostrum is much broader, and the punctures on the basal half are longitudinally confluent; the greatest width of the prothorax is at about one-third from the base, and on the lateral third of the dorsum the punctures are entirely confluent, the interspaces appearing like broken sinuous ridges; and the golden setae on the pronotum and elytra are longer and more conspicuous. The species was originally recorded from Tahiti.

### Gitonischius, gen. nov.

*Head* sub-conical, the eyes separated from the prothorax by more than their own length. *Rostrum* sub-cylindrical, the scrobes curving down to the lower anterior margin of the eyes. *Antennae* inserted at about the middle of the rostrum; the funicle 5-jointed, only the basal joint elongate; the club ovate, 3-jointed. *Prothorax* sub-cylindrical, as broad at the apex as at the base. *Elytra* sub-cylindrical, distinctly wider than the prothorax, with prominent sub-rectangular shoulders, and stria 10 abbreviated. *Legs* slender, the third tarsal joint not lobate. *Underside* with the front coxae very closely approximated; ventrite 1 longer than 2, and 2 a little longer than 3+4.

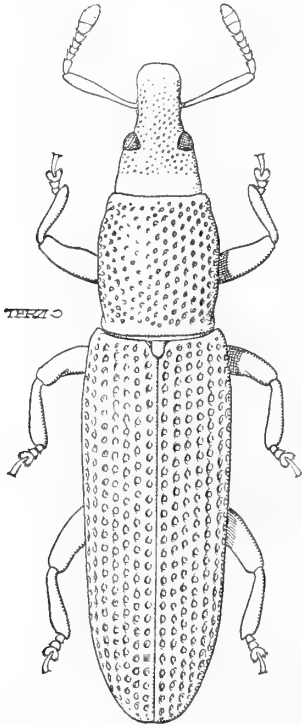
Genotype, *Gitonischius tubicollis*, sp. n.

Most nearly allied to *Microtrupis*, Champ. 1914, but differing from this and from such other related genera as *Pentarthrum*, Woll. 1854, and *Stenopentarthrum*, Champ. 1914, in its sub-contiguous front coxae, cylindrical prothorax, and unconstricted head.

66. *Gitonischius tubicollis*, sp. n. (Text-fig. 24).

Colour uniform piceous brown, not very shiny.

*Head* about as long as the width across the eyes, narrowing from base to apex, with the sides straight, the distance from an eye to the prothorax about



TEXT-FIG. 24.—*Gitonischius tubicollis*, sp. n.

twice the length of the eye; the vertex with fine separated punctures; the forehead similarly punctate, slightly flattened in the middle, without any median fovea. *Rostrum* gently curved, not dilated at the apex, the punctures on the basal half like those on the head, but becoming indistinct anteriorly. *Antennae* with the apical half of the scape clavate; the funicle with joint 1 as long as the next three together, 2 as long as broad, the rest transverse. *Prothorax* sub-cylindrical, a little longer than broad, slightly rounded at the sides, widest at or before the middle, and with a narrow, shallow constriction close to the apex; the base truncate and not marginate; the dorsum even, minutely aciculate, and set throughout with fine, distant punctures, which are not larger than those on the head. *Scutellum* small, rounded. *Elytra* sub-cylindrical, parallel-sided from the shoulders to the middle then gradually narrowed to the apex, and truncate at the base, the posterior declivity rather steep; the striae very shallow, with small, fairly close punctures, which become obsolescent on the declivity;

the intervals about as wide as the striae, impunctate. *Underside* opaque, aciculate, with small, shallow, distant punctures, each containing a minute, recumbent seta.

Length: 1.5–1.6 mm.; breadth, 0.3 mm.

Tutuila: Fagasa, 17 specimens, in nutmeg tree, 9.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

67. *Stenotrupis myristicae*, sp. n.

♂♀. Colour uniform reddish brown, rather dull.

*Head* distinctly longer than broad, of about the same length in the two sexes, but slightly broader in ♀, strongly constricted at the base, the stricture being as deep dorsally as it is laterally; the distance between the eye and the constriction about twice the length of the eye; the dorsum convex longitudinally, with close, shallow, sub-reticulate punctation; the forehead flattened, without a median fovea, distinctly narrower than the base of the rostrum. *Rostrum* slightly longer than the head (including the basal constriction) in ♂ (11 : 13) and nearly twice as long in ♀ (11 : 20), with a distinct lateral angulation above the insertion of the antennae and thence gradually widening to the apex, broader and with close, shallow, rugulose punctation in ♂, narrower in ♀ and with much finer punctation beyond the antennae. *Antennae* with joint 2 of the funicle longer than broad; the club rather narrowly elliptical. *Prothorax* longer than broad (4 : 3), pyriform, widest at one-third from the base, shallowly constricted quite close to the apical margin, and with strong, close, subreticulate punctation throughout. *Elytra* of the usual narrowly elongate form, parallel-sided from the shoulders to about the middle of ventrite 2, with shallow striae containing strong, close punctures; the intervals narrower than the striae, very finely rugulose, and bearing rows of minute, sloping, pale setae on the apical third, the sutural margin sub-carinate from near the base to the top of the declivity. *Legs* with the front tibiae not mucronate at the inner apical angle; joint 3 of the tarsi distinctly broader than 2. *Underside* sub-opaque, minutely pubescent, and with fine separated punctures.

Length: 2.0–2.7 mm.; breadth, 0.5–0.6 mm.

Tutuila: Fagasa, ♂♂, ♀♀, 9.ix.1923, on nutmeg tree (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

This species is chiefly characterised by the depth of the cephalic constriction dorsally and the elevation of the elytral suture. *S. tarsalis*, Champ., from the Seychelles, closely resembles this species in colour and general facies but differs, *inter alia*, in its finer punctation, the punctures on the upper surface being separated at least by a space equal to their own diameters; the very deep prothoracic constriction, which is twice as far from the apex; and by the much more dilated third tarsal joint.

The genotype, *S. crassifrons*, Woll., is a larger, darker insect, with a simi-

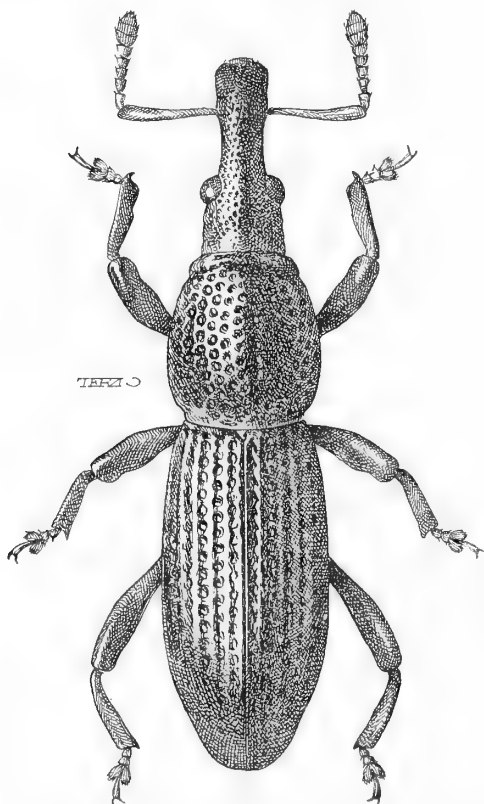


larly shaped prothorax, but again much more finely punctate; joint 2 of the funicle is not longer than broad; the front tibiae are strongly mucronate, and joint 3 of the tarsi is not broader than 2.

68. *Microtribus longiceps*, sp. n. (Text-fig. 25).

♀. Colour dark piceous, with the legs and antennae paler.

*Head* about as long as the width across the eyes, which are oval and somewhat prominent, gradually widening from the eyes to the base without any



TEXT-FIG. 25.—*Microtribus longiceps*, sp. n., ♀.

constriction, finely alutaceous, strongly and closely punctate, the punctures becoming smaller and sparser towards the vertex, which is not globose; the forehead slightly flattened, with an inconspicuous median fovea. *Rostrum* elongate, about three-fourths the length of the pronotum, almost straight in the basal half and rather steeply declivous in front, parallel-sided from the base to the middle and somewhat broader in the apical half, closely punctate throughout, the punctures becoming smaller and longitudinally confluent anteriorly.

*Antennae* with the scape a little longer than the funicle, the latter with joint 2 almost as long as 3+4, 3 to 5 transverse and equal. *Prothorax* slightly longer than broad, strongly rounded at the sides, widest at the middle, deeply and narrowly constricted quite close to the apex, the constriction continued shallowly across the dorsum, which is closely set

with large, deep punctures that are much wider than the interspaces; each puncture with a long, recumbent, pale seta. *Scutellum* minute. *Elytra* narrower at the shoulders than the widest part of the prothorax, very slightly widening to behind the middle, truncate at the base, and jointly rounded at the apex;

the striae broad and distinct throughout, containing strong, close rounded punctures, but stria 7 present only in the apical two-thirds; the intervals rather narrower than the striae and impunctate, interval 9 not elevated at the apex. *Legs* with the femora shiny and sparsely punctate; the tibiae impunctate, thinly pubescent and with a fine spine at the inner apical angle. *Venter* with coarse, diffuse punctation.

Length: 2.5–2.6 mm.; breadth, 0.7 mm.

Tutuila: Amauli, 1 ♂, 1 ♀, 6.ix.1923 (Swezey and Wilder).

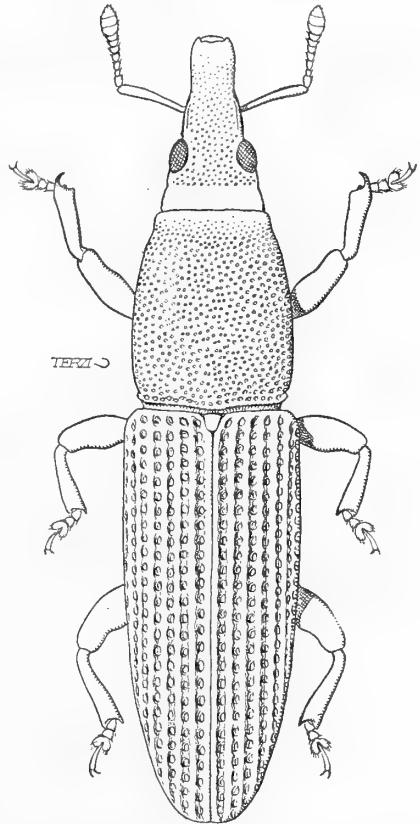
*Type* in the Bishop Museum, Honolulu.

Differs from the two New Zealand species, *M. huttoni*, Woll., and *M. pictonensis*, Shp., in its longer sub-quadrate head, larger and much more prominent eyes, and much coarser punctation; also in having the antennae inserted distinctly in front of the middle and with the scape longer than the funicle, and in the presence of a spine at the inner apical angle of the tibiae.

69. *Phloeophagosoma carinirostre*, sp. n.  
(Text-fig. 26).

♂♀. Colour piceous black, rather shiny, quite bare; the apical half or three-fourths of the rostrum red-brown; the elytra with a red-brown stripe between striae 4 and 6, invading the whole apex, and extending more or less distinctly across the base, but the red-brown markings occasionally more extensive or reduced to no more than a small humeral patch.

*Head* with a well-marked constriction distant from the eye about three-fourths the longitudinal diameter of the eye; the anterior part moderately convex, with fine, strong punctures separated by at least their own diameters, without any frontal fovea; the eyes almost flat. *Rostrum* much shorter than the pronotum in ♀ (3:5), slightly longer in ♂ than in ♀, curved, rather stout,



TEXT-FIG. 26.—*Phloeophagosoma carinirostre*, sp. n., ♀.

narrowing from the base to the middle with a slight curve, thence parallel-sided to the apex; the punctures at the base like those on the forehead but rapidly diminishing in size and density anteriorly, especially in ♀; the scrobes extending from the base to the middle (♀) or beyond it (♂), their upper edge narrowly carinate right up to the eye, with a stria beside the carina above. *Antennae* with the second joint of the funicle transverse. *Prothorax* sub-pyriform, widest behind the middle, gently rounded at the sides, gradually narrowing in front, and shallowly constricted at the apex, the constriction continued faintly across the disk; the dorsum flattened, finely and evenly punctate, the punctures being usually separated by more than their own diameters, and without any smooth median line. *Elytra* a little wider than the prothorax, gradually narrowing in the posterior half, distinctly striate, the punctures separated, broader than the striae and diminishing behind; the intervals each with a row of minute punctures.

Length: 2.8–3.0 mm.; breadth, 0.7–0.8 mm.

Upolu: Vailima, 1 ♀ (type), 3.vi.1924; Malololelei, 1 ♂, 1 ♀, vi.1924.

Tutuila: Pago Pago, 1 ♂, 2 ♀♀, 20, 24.ix.1923 (Swezey and Wilder).

Savaii: Salailua, 1 ♂, 22.v.1924 (Bryan).

The lateral stria and carina on the rostrum will distinguish this species from its congeners.

#### 70. *Pseudolus longulus*, Boheman.

*Rhyncolus longulus*, Boheman, *Eugenies Resa*, *Ent.*, p. 149, 1859.

*Pseudolus longulus*, Boh., Sharp, *Trans. R. Dublin Soc.*, (2) iii, p. 190, pl. v, fig. 33, 1885.

Upolu: Apia, 2 specimens, ix.1923 (Swezey and Wilder); 4 specimens, xi.1924–i.1925 (Buxton and Hopkins).

Tutuila: Pago Pago, 3 specimens, ix.1923 (Swezey and Wilder).

#### 71. *Oxydema fusiforme*, Wollaston.

*Trans. Ent. Soc. Lond.*, 1873, p. 632.

*Pseudolus hospes*, Perkins, *Fauna Hawaii.*, ii, p. 149, 1900.

Samoa: two specimens, without exact data. \*

#### 72. *Oxydema simplex*, sp. n.

♂♀. Colour rather shiny black, the elytra often more or less tinged with red-brown; antennae and legs red-brown.

*Head* with the globular shiny vertex separated from the anterior part by a shallow transverse impression and with only a few scattered punctures along its front margin; anterior part with strong separated punctures throughout, the distances between the discal ones being at least equal to their own diameter; frons with a deep median fovea. *Rostrum* as long as a front femur, proportionately longer and more curved in ♂ than in ♀, subparallel-sided from the base to the antennae, there rather abruptly dilated, and then slightly widening to the apex, closely and strongly punctate throughout, the punctures becoming smaller and denser anteriorly. *Prothorax* longer than broad, gently rounded at the sides, shallowly constricted near the apex, the dorsal continuation of the constriction being feeble and often obsolete, with strong, separated punctures throughout and without any obvious median impunctate stripe, the dorsal punctures being largest at the base and gradually diminishing anteriorly; pleurae more coarsely and much more closely punctate than the dorsum. *Elytra* elongate, gradually narrowing behind the middle, and roundly sub-truncate at the apex; the striae distinct and containing strong, close punctures, which scarcely diminish behind; the intervals slightly convex, and each with a single, often irregular, row of minute punctures.

Length: 4.5–6.0 mm.; breadth, 1.1–1.6 mm.

Upolu: Tafua Volcano, 1 ♂, 1917 (Dr. H. Swale—type); Apia, 4 ♂♂, 3 ♀♀, 15.ix.1923 (Swezey and Wilder); 1 ♂, 1 ♀, ii.1924 (Buxton and Hopkins); Malololelei, 1 ♀, iv.1924.

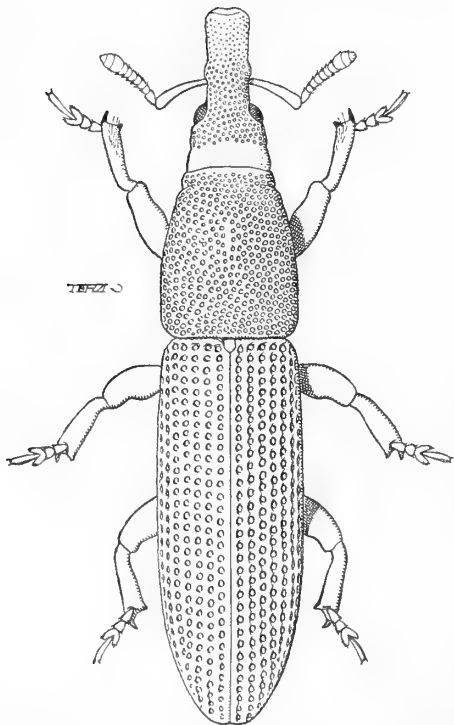
Very closely allied to *O. fusiforme*, Woll., which differs in having the head and rostrum more coarsely and closely punctate; the prothorax is much more strongly constricted near the apex, the constriction being conspicuously continued across the dorsum, and the punctures are of more even size throughout and leave a distinct, though ill-defined, abbreviated, median impunctate stripe.

### 73. *Aphanocorynes savaiiensis*, sp. n.

♂. Rather dull black, bare.

*Head* strongly constricted laterally, but the constriction not continued across the dorsum; the vertex with a few small, sparse punctures; the anterior part strongly punctate, the interspaces generally about as wide as the punctures, with a very small median fovea; the space between the eye and the constriction nearly double the longitudinal diameter of the eye. *Rostrum* nearly twice

as long as broad, quite straight dorsally from the base to three-fourths, then gently sloping to the apex, narrowing from the base to the deep excision above the antennae, and very slightly widening from there to the apex, strongly punctate, the punctures being rather smaller and denser than those on the head and becoming finer at the apex; a dense row of erect setae on the margin of the submentum. *Antennae* piceous, the club very slightly paler; the scape extending beyond the hind margin of the eye; joints 2-7 of the funicle equal, very short, at least three times as broad as long. *Prothorax* longer than broad (4:3), widest close to the base, thence gradually narrowing anteriorly with a slight curve, strongly constricted near the apex, the constriction continued shallowly across the dorsum, and also deeply constricted at the base, leaving a small, projecting basal angle; the dorsum flattened, strongly punctate, the punctures being separated for the most part by about their own diameters, but



TEXT-FIG. 27.—*Aphanocorynes humeralis*,  
sp. n., ♂.

much denser on all the margins and the pleurae. *Elytra* of the usual elongate form, but somewhat more flattened on the disk; the punctures on the disk strong and much wider than the striae, so that the edges of the intervals are crenulated; the intervals uneven, and each with a well-marked row of punctures, interval 9 subcostate at the apex. *Venter* of ♂ with two widely separated pairs of erect setae on the posterior margin.

Length: 4.7 mm.; breadth, 1 mm.

Savaii: 1 ♂, ii.1913.

74. *Aphanocorynes humeralis*, sp. n. (Text-fig. 27).

♂♀. The description of *A. savaiiensis*, sp. n., applies to this species except in the following particulars:—

*Head* with the small median fovea even less distinct, and the space between the eye and the constriction equal to the longitudinal diameter of the eye. *Rostrum* with the anterior part almost parallel-sided and not dilated at the apex;

rostrum of ♀ distinctly shorter than that of ♂, and the bristles on the submentum reduced to about four. *Antennae* with the club much paler, the scape reaching only to the hind margin of the eye. *Elytra* with a small red-brown spot on the shoulder.

Length : 2.9–3.6 mm. ; breadth, 0.6–0.8 mm.

Upolu : Apia, 1 ♂, xii.1924 (type), 1 ♂, i.1925.

Tutuila : Amauli, 1 ♂, 2 ♀♀, 5–6.ix.1923, and Pago Pago, 1 ♂, 24.ix.1923 (Swezey and Wilder).

The two foregoing species of *Aphanocorynes* differ from all the Australian species known to me in the following characters: The general punctation is much coarser; the cephalic constriction is stronger and situated further back; the second funicular joint of the antennae is much shorter than the first.

#### 75. *Notiosomus cervicalis*, sp. n.

♂♀. Colour piceous, bare.

*Head* distinctly constricted at one-third from the base and parallel-sided from there to the eyes, which project somewhat laterally; the vertex impunctate or with a few minute punctures, the anterior part with strong punctures, which are mostly separated by a space equal at least to their own diameters; the forehead slightly depressed and with a deep median fovea. *Rostrum* more than twice as long as broad in ♂, distinctly shorter in ♀, but otherwise similar; parallel-sided from the base to the antennae (which are inserted behind the middle), and there rather abruptly dilated, then very slightly widening to the apex; the punctures at the base like those on the head, but becoming much smaller and denser anteriorly, those just in front of the eyes larger, shallow and confluent. *Prothorax* much longer than broad in ♂ (13 : 9), gently rounded at the sides, widest at about one-third from the base; shorter and broader in ♀ (11 : 9.5), more rounded laterally, and widest at about two-fifths from the base; the dorsum with strong punctures throughout, mostly separated by the length of their own diameters or more. *Elytra* elongate, distinctly wider at the shoulders than the base of the prothorax; the shallow striae with large, round, separated punctures, the intervals about as wide as the striae, and each with a row of fine, spaced punctures.

Length : 4.5–5.7 mm. ; breadth 1.0–1.2 mm.

Upolu : Apia, 5 ♂♂, 1 ♀, 15.ix.1923 (Swezey and Wilder).

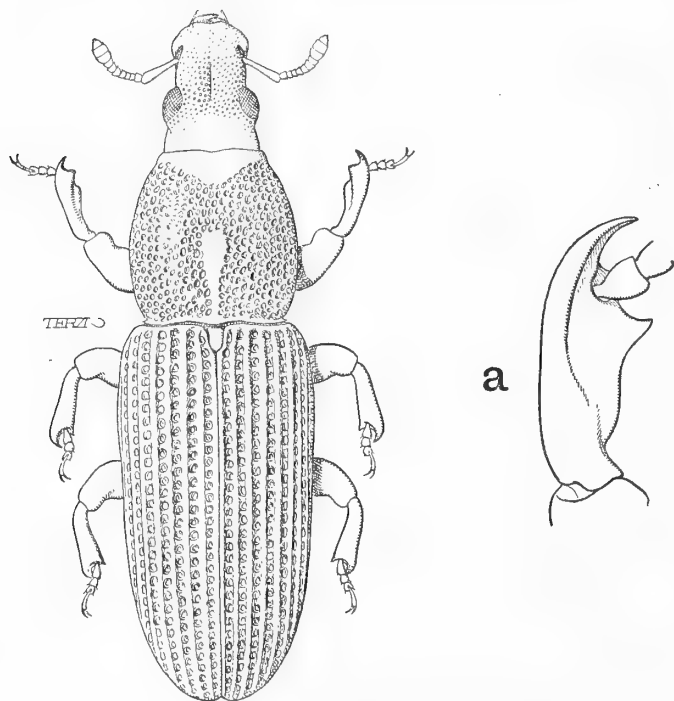
*Type* in the Bishop Museum, Honolulu.

Closely related to *N. major*, Woll. 1873, from Queensland, which differs from it in the following characters: The cephalic constriction is less marked, the forehead is not depressed, and the eyes do not project beyond the lateral outline of the head; the prothorax is less elongate (12.5:10 in ♂), much more rounded at the sides, widest at about the middle, with the sub-apical constriction more abrupt, and with the punctures much denser on the disk; the antennae are inserted at the middle of the rostrum.

76. *Cossonus platyrrhinus*, sp. n. (Text-fig. 28).

♂. Piceous black, moderately shiny, the rostrum piceous, and the last tarsal joint honey-coloured.

*Head* rather deeply constricted laterally behind the eyes, the constriction



TEXT-FIG. 28.—*Cossonus platyrrhinus*, sp. n., ♂; a, inner lateral view of front tibia.

continued broadly but very shallowly across the head; the vertex with fine, distant punctures; the forehead with larger, unevenly distributed punctures and with a very broad, deep, median sulcus, which is continued on the basal

half of the rostrum ; the eyes large, moderately convex. *Rostrum* unusually short and broad, shorter than the head, about as long as broad, parallel-sided in the basal half and somewhat dilated at the apex ; the dorsum with shallow, scattered punctures (smaller than those on the forehead), in the basal half sloping laterally and with a broad, deep, median sulcus, in the apical half flattened and with a broad, shallow, discal depression. *Antennae* very stout, joint 1 of the funicle triangular and about as long as broad, the remainder strongly transverse and gradually widening distally. *Prothorax* as long as broad, moderately rounded at the sides, widest behind the middle, moderately constricted at the apex, the constriction being shallowly and obliquely continued into the median dorsal impression ; the base bisinuate and narrowly marginate ; the dorsum set throughout with large, oval punctures, with a broad, shallow, median depression from the base to the apical constriction, containing in the basal half a large median, pear-shaped, impunctate area, the narrow end of which is continued as a carina to the base ; the large, triangular, apical area smooth, with small scattered punctures ; on the lateral areas the punctures are but little coarser than those on the disk. *Elytra* oblong-ovate, about twice as long as broad, with broad, deep striae containing large, close punctures that do not diminish much behind, but striae 9 and 10 becoming merely rows of punctures in the middle ; the intervals narrower than the striae, and each with a row of minute punctures, interval 9 becoming broadly costate at the apex. *Legs* very stout and with fine, sparse punctures ; the posterior pairs of femora distinctly pedunculate ; the front tibiae very broad, deeply excavated behind, and with a stout tooth on the lower edge above the apical angle.

Length : 6 mm. ; breadth, 1.8 mm.

Upolu : Malololelei, 1 ♂, 24.ii.1924.

This species most nearly resembles *C. bisulcatus*, Champ. 1909, from Panama, and is characterised by its unusually short and broad rostrum, the deep sulcus on the forehead and base of the rostrum, and the strongly dentate front tibiae.

#### 77. *Cossonus dentipes*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 597, 1921.

Upolu : Apia, 2 ♂♂, 2 ♀♀ (Dr. K. Friedrichs).

Tutuila : Pago Pago, 10 ♂♂, 20 ♀♀, 21.ix.1923.

In the original description the intervals on the elytra are described as being not narrower than the punctures ; for " punctures " read " striae."



78. *Cossonus limbaticollis*, Marshall.

*Proc. Hawaii. Ent. Soc.*, iv, p. 598, 1921.

Tutuila (Dr. Kellers).

This species does not appear to be represented in the material before me. In the original description the punctures on the vertex of the head are stated to be more "distinct"; this is a misprint for "distant."

79. *Cossonus quaerens*, sp. n.

Colour shiny black, the apex of the rostrum often piceous; the elytra black, with a rather indefinite, yellowish-brown stripe on each, usually restricted between striae 1 and 6 near the base and between 1 and 4 posteriorly, but ceasing before the declivity; sometimes the brown stripes are much darkened and indistinct, so that the elytra appear to be generally piceous.

*Head* slightly constricted behind the eyes, which are feebly convex; the vertex globose, shiny and with a few minute punctures; the forehead transversely convex, with rather larger but sparse punctures and a small median fovea. *Rostrum* short, about one-third the length of the pronotum, parallel-sided from the base to the middle and only slightly wider in the apical half, gently curved dorsally, and with uneven, fine punctation. *Pronotum* longer than broad (5:4), gently rounded at the sides, widest far behind the middle, strongly constricted at the apex, the constriction continued feebly across the dorsum; the base bisinuate, with a small, strongly punctate, transverse impression on each side of the median projection; the dorsum with an undefined, broad, median, impunctate stripe from the base to about three-fourths, elsewhere with widely spaced, strong punctures, varying somewhat in size and distribution, but the admedian ones usually larger than the others. *Elytra* sub-oblong, elongate, parallel-sided from the shoulders to three-fourths; the striae shallow, especially at the sides, containing fairly close oval punctures which gradually diminish behind; the intervals about as wide as the striae and entirely impunctate.

Length: 3.4-3.6 mm.; breadth, 0.9-1.0 mm.

Upolu: Apia (type), 5 specimens (Deutsch. Ent. Inst.).

Savaii: Salailua, 1 specimen, 19.v.1924 (E. H. Bryan).

79A. *Cossonus quaerens afonus*, subsp. n.

Differs from the typical form in the following particulars: The brown colouring has invaded the whole elytra, except the suture, which is indefinitely darker or blackish, and sometimes the extreme lateral margins; the prothorax is slightly wider proportionately, and its greatest width is only a little behind the middle, the punctures being notably smaller and the impunctate, median stripe less regular.

Tutuila: Afono, 16 specimens, 25.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

80. *Proëces praeustum*, sp. n.

♂♀. Red-brown; the head, base of the rostrum, pronotum and the posterior half of the elytra (to a variable extent) blackish; the antennae and legs ferruginous.

*Head* distinctly constricted immediately behind the large convex eyes, with the constriction continued shallowly across the dorsum; the forehead closely punctate, without any median fovea. *Rostrum* of ♂ much shorter than the pronotum (4.5:7), rather stout, curved, sub-cylindrical, parallel-sided, with the punctures rather finer than those on the forehead, becoming smaller in front and more or less confluent laterally near the base; in ♀, slightly longer, with the punctures rather finer and sparser towards the apex. *Prothorax* somewhat longer than broad, sub-conical, gently rounded at the sides, widest far behind the middle, shallowly constricted at the apex, and excavated laterally in front for the reception of the large front femora; the dorsum finely and closely punctate throughout except for a very short median impunctate line. *Elytra* very slightly narrower than the prothorax, elongate, parallel-sided to far beyond the middle; the striae rather deep, containing shallow distant punctures that do not diminish behind and are wider than the striae; the intervals broader than the striae, each with a row of close minute punctures, intervals 7 and 9 jointly costate at the apex.

Length: 3.1–3.5 mm.; breadth, 0.8–0.9 mm.

Tutuila: Pago Pago, 1 ♂, 10.ix.1923 (Swezey and Wilder—type).

Savaii: Safune, rain forest, 2,000–4,000 ft., 1 ♀, 9.v.1924 (Bryan).

*Type* in the Bishop Museum, Honolulu.

Very close to *P. silvestris*, Kolbe 1910, from the Seychelles, which differs, *inter alia*, in having the pronotum red-brown and without any median impunctate line, the striae on the elytra wider and not exceeded by the contained punctures, and intervals 7 and 9 not costate at the apex.

### *Mystrorrhinus*, gen. nov.

*Head*, globose, strongly constricted immediately behind the eyes, which are shortly and transversely ovate and very prominent; the forehead as broad as the base of the rostrum. *Rostrum* very broadly spatulate at the apex in ♂, very long and slender in ♀; the antennae inserted at the middle in ♀ and far beyond it in ♂, the point of insertion not visible from above, and the scrobes passing rapidly beneath the rostrum and continued deeply to the base; the submentum bearing two long, sub-erect setae in both sexes. *Antennae* with the scape somewhat curved and strongly clavate, longer and more slender in ♀; funicle with 7 joints. *Elytra* with stria 10 uniting with 9 behind the middle. *Legs*: trochanters without a seta; the tibial uncus comparatively small and inconspicuous, especially on the posterior pairs, the front tibiae hardly sinuate on the inner edge; joint 3 of tarsus much broader than 2 but not bilobate. *Underside*: space between the front coxae about two-thirds the width of a coxa, that between the median coxae rather wider than a coxa; the abdominal process comparatively narrow, rounded.

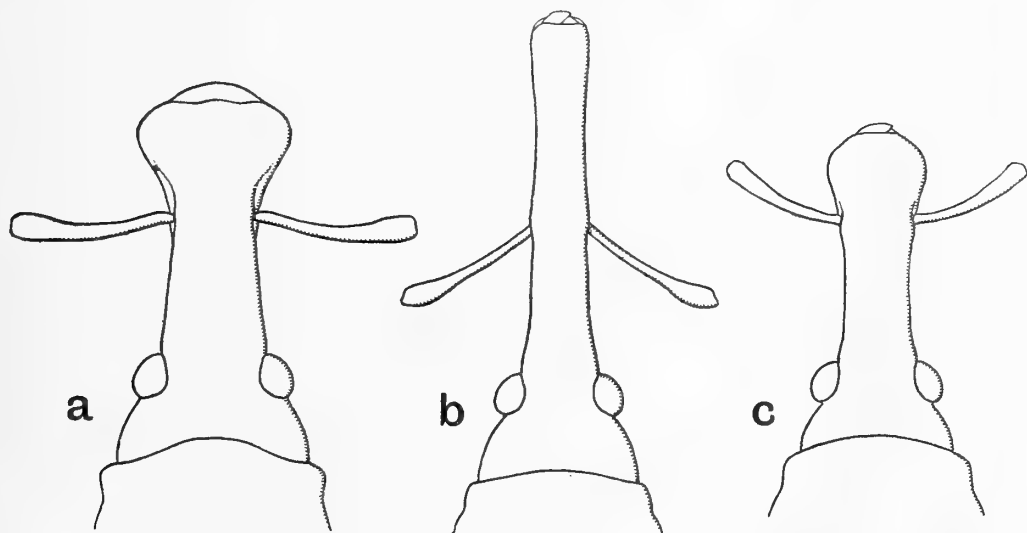
Genotype, *Mystrorrhinus dimorphus*, sp. n.

This is a somewhat isolated genus which is not easy to place satisfactorily in the absence of any classification of the COSSONINAE, but it might come provisionally near *Proëces* and *Catolethrus*. The globose head with the marked constriction behind the very prominent eyes makes the latter appear as though they were situated on the base of the rostrum. The triangularly spatulate rostrum in the ♂ is also an unusual feature, and, moreover, this apical dilatation varies, being much broader in some individuals than in others, whereas the rostrum of the female is rather exceptionally long and slender throughout (text-fig. 29).

81. *Mystrorrhinus dimorphus*, sp. n. (Text-figs. 29, 30).

♂♀. Rather shiny, piceous, with the pronotum sometimes blackish, bare, except for a few fine sparse erect setae, especially on the apical third of the elytra.

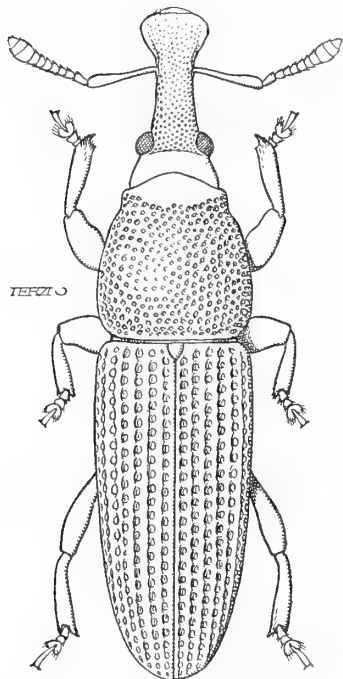
*Head* with the globular portion very sparsely and finely punctate and separated from the forehead by a deep, transverse incision, its lower surface transversely striolate; on each side of the base of the forehead two fine, erect setae, the inner ones being longer than the outer. *Rostrum* (text-fig. 29) of ♂



TEXT-FIG. 29.—Head of *Mystrorrhinus dimorphus*, sp. n.: a, large ♂; b, ♀; c, small ♂.

nearly as long as the pronotum (4.5:5), gently curved, gradually narrowing from the base to beyond the middle, then rapidly and triangularly dilated at the apex (the width of the dilatation varying in different individuals), and with the whole dorsum rather strongly and closely punctate; rostrum of ♀ longer, as long as the pronotum, more curved, very slender, sub-cylindrical; slightly narrowing from the base to the middle, where there is a small dilatation above the insertion of the antennae, and gradually widening again to the apex, which is about as broad as the base, the dorsal punctation being notably finer and sparser than in ♂. *Antennae* ferruginous, with the scape reaching the middle or base of the eye (beneath) and bearing sparse setae; the funicle with joint 1 as long as 2+3, 2 as long as broad, the remainder transverse and

gradually widening distally. *Prothorax* a little longer than broad (5:4.5) widest not far from the base, rapidly narrowing behind (the base being only



TEXT-FIG. 30.—*Mystrorrhinus dimorphus*, sp. n., large ♂.

slightly broader than the apex) and more gradually in front, strongly constricted close to the apex, the constriction being continued across the dorsum in a backward curve; the dorsum flat, with strong, even punctures throughout, mostly separated by about their own diameters, except on the discal area in front of the apical constriction, which is entirely impunctate and shiny; normally a few small sub-erect setae at the anterior apical angles. *Elytra* widest behind the shoulders, and there as wide as the prothorax, very gradually narrowing behind, and rather narrowly rounded at the apex; the striae rather broad and deep on the disk but very shallow laterally, containing closely set punctures that encroach somewhat on the intervals and do not diminish behind, striae 6-8 usually somewhat confused; the discal intervals not narrower than the striae, sometimes rather uneven, and each with a row of distinct punctures; on the apical third a few sparse erect setae.

Length: 1.5-1.9 mm.; breadth, 0.5-0.6 mm.

Upolu: Apia, 5 ♂♂, 6 ♀♀, 12.ix.1923 (Swezey and Wilder—type).

Tutuila: Amauli, 1 ♂, 6.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.

## 82. *Rhyncolosoma subsignatum*, sp. n. (Text-fig. 31).

♂♀. Colour testaceous brown to blackish brown, the elytra with an indefinite paler testaceous band across the base and a large patch of the same type occupying most of the posterior declivity.

*Head* sparsely punctate, the forehead slightly flattened, with much larger and closer punctures and a large median fovea; the eyes narrow, elongate, flattened. *Rostrum* rather stout, about as long as a front femur, parallel-sided, gently curved, very similar in the two sexes, slightly longer and a little less

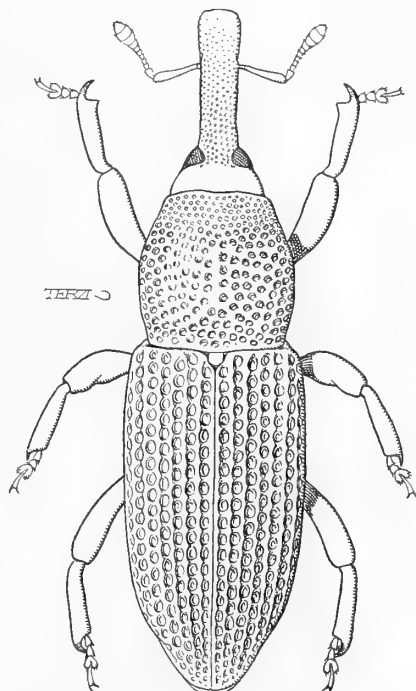
strongly punctate in ♀, not setose beneath in ♂; the punctures comparatively strong and close at the base and becoming gradually finer and sparser in front. *Antennae* inserted well beyond the middle of the rostrum, with the scape comparatively slender, not reaching the eye. *Prothorax* about as long as broad, rounded at the sides, widest at the middle, more narrowed in front than behind, feebly constricted at the apex; the dorsum slightly flattened, strongly and closely punctate, without any smooth median line. *Elytra* distinctly wider than the prothorax and with a definite humeral callus, deeply striate, with large, close punctures that are wider than the striae and diminish behind; the narrow sinuous intervals each with a row of fine spaced punctures. *Underside* strongly and closely punctate, even on the two basal ventrites.

Length: 2.2–2.6 mm.; breadth, 0.8–0.9 mm.

Upolu: Malololelei, 2,000 ft., 3 ♂♂, 4 ♀♀, vi.1924.

This small species is in some respects intermediate between the hitherto monotypic *Rhyncolosoma*, Champ. 1914, and *Ochronanus*, Pasc. 1885, but is placed in the former genus because it agrees with it in having no postocular lobes or vibrissae on the prothorax, in its distinctly bilobed third tarsal joint, the comparatively small eyes, and in the medianly obliterated first ventral suture.

The genotype, *R. dubium*, Gahan 1900, from the Seychelles and Christmas Island, is a larger insect with oval convex eyes; the rostrum of the ♂ is hirsute beneath; the antennae are stouter, with the scape reaching the eye; the prothorax is widest behind the middle and there as broad as the elytra; the punctures on the elytra are not wider than the striae, so that the intervals are not sinuous, etc.



TEXT-FIG. 31.—*Rhyncolosoma sub-signatum*, sp. n., ♂.

83. *Ochronanus pumilus*, sp. n.

♂♀. Testaceous yellow to pale brown ; bare.

*Head* very finely and sparsely punctate anteriorly, the punctures being much finer and sparser than those on the base of the rostrum ; the forehead more coarsely and closely punctate, and feebly impressed transversely. *Rostrum* about as long as a front femur, parallel-sided, slightly curved, more or less confluent punctate at the base, the punctures becoming finer and sparser in front, especially in ♀, in which the rostrum is also slightly longer and narrower. *Prothorax* a little longer than broad, sub-conical, widest not far from the base, with the sides gently curved, the sub-apical constriction being invisible from above ; the dorsum strongly and closely, but not confluent, punctate throughout, the punctures on the disk being almost or quite as large as those in the elytral striae. *Elytra* about twice as long as broad, parallel-sided, only slightly wider at the shoulders than the broadest part of the prothorax ; the punctures rounded and wider than the striae, so that the intervals are crenulated ; the latter wider than the striae, and each with a row of extremely inconspicuous remote punctures. *Legs* with the femora shiny and bearing fine, sparse punctures ; the front tibiae shallowly sinuate on the apical half of the ventral edge and there bearing a dense fringe of white hairs.

Length : 1.75–1.88 mm. ; breadth, 0.60–0.65 mm.

Upolu : Apia, 1 ♀, v.1924.

Tutuila : Fagasa, 11 ♂♂, 20 ♀♀, 9.ix.1923 (Swezey and Wilder—type).

*Type* in the Bishop Museum, Honolulu.

The genotype, *O. pymaeus*, Pasc. 1885, from Java, differs from the present species in having the head as strongly and closely punctate as the base of the rostrum ; the punctures on the disk of the prothorax are smaller than those in the striae of the elytra, and the sub-apical constriction is clearly visible from above ; and the elytra at the shoulders are markedly wider than the prothorax.

*O. metasternalis* and *puncticollis*, Heller 1916, from New Caledonia, are both much larger species (3 and 2.8 mm., respectively) and differ notably, *inter alia*, in the structure of the metasternum, the former having a carina on each side of this sternite and the latter a tubercle.

84. *Stereoderus binodifrons*, Marshall.*Proc. Hawaii. Ent. Soc.*, iv, p. 598, 1921.

Upolu (Dr. Swale).

Savaii : Safune, rain forest, 2,000–4,000 ft., 1 ♀, 8.v.1924 (Bryan).

85. *Rhyncolus samoanus*, Marshall.*Temnorhamphus samoanus*, Marshall, *Proc. Hawaii. Ent. Soc.*, iv, p. 599, 1921.

Upolu : Apia, 1 ♀, 15.ix.1923 (Swezey and Wilder), 1 ♂ (Dr. K. Friedrichs).

Tutuila : Pago Pago, 2 ♂♂, 21.ix.1923 (Swezey and Wilder).

This species was wrongly described as a *Temnorhamphus* and must be transferred to the genus *Rhyncolus*.86. *Rhyncolus fuscicollis*, sp. n.

♂♀. Colour red-brown, with the prothorax blackish.

*Head* with distinct separated punctures and without a frontal fovea. *Rostrum* about as long as broad, with the punctures finer and closer than those on the head and with a very shallow rounded median impression near the apex ; the scrobe running right up to the front margin and turning sharply downwards along the margin, its upper edge being on a level with the upper edge of the eye. *Antennae* with joint 1 of the funicle about as long as broad, the rest strongly transverse and slightly widening distally ; the club distinctly compressed. *Prothorax* slightly longer than broad, widest near the base, rapidly narrowed behind and gradually so in front, with a shallow sub-apical constriction that does not extend to the dorsum, finely and closely punctate above, with an abbreviated median impunctate line ; the pleurae with much shallower and sparser punctures. *Elytra* sub-cylindrical, not wider than the prothorax, and rather gradually declivous at the apex ; the striae rather shallow, strongly crenato-punctate, the punctures not diminishing behind ; the intervals somewhat convex, smooth, each with a row of minute punctures ; interval 9 narrowly carinate from about the middle to near the apex and there obtusely costate.

Length : 2.5–2.8 mm. ; breadth, 0.7–0.8 mm.

Tutuila : Pago Pago, 1 ♂, 21.ix.1923 (Swezey and Wilder—type) ; Afono Trail, 1 ♀, 25.ix.1923 (Swezey and Wilder).

*Type* in the Bishop Museum, Honolulu.



In addition to its smaller size, this species differs from *R. samoanus* in the following characters: The punctures on the rostrum, even at the base, are markedly smaller than those on the head; the prothorax is more elongate, more sub-conical, with the sides straighter, and the punctures are much smaller, the interspaces being almost always as wide as or wider than the punctures; interval 9 on the elytra unites with interval 1 at the apex, whereas in *samoanus* it unites with 3. As is usual in this genus, interval 1 on the right elytron is much wider at the apex than the same interval on the left elytron.

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 „ 3. *Elytrurus bicolor*, Mshl., ♂.  
 „ 4. *Nodocnemus subfasciatus*, sp. n., ♂; a, lateral view of head and prothorax.  
 „ 5. *Hesychobius nebulosus*, sp. n., ♂.  
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# INSECTS OF SAMOA

## AND OTHER SAMOAN TERRESTRIAL ARTHROPODA

### LIST OF PARTS AND SYSTEM OF PUBLICATION:—

- Part I. Orthoptera and Dermaptera.  
 „ II. Hemiptera.  
 „ III. Lepidoptera.  
 „ IV. Coleoptera.  
 „ V. Hymenoptera.  
 „ VI. Diptera.  
 „ VII. Other Orders of Insects.  
 „ VIII. Terrestrial Arthropoda other than Insects.  
 „ IX. Summary and Index.

The work is published at intervals in the form of numbered fascicles. Although individual fascicles may contain contributions by more than one author, each fascicle is so arranged as to form an integral portion of one or other of the Parts specified above.

### List of Fascicles issued to 25th April, 1931:—

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| <br><b>PART II. HEMIPTERA.</b>   |   |
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